

AMATEUR RADIO

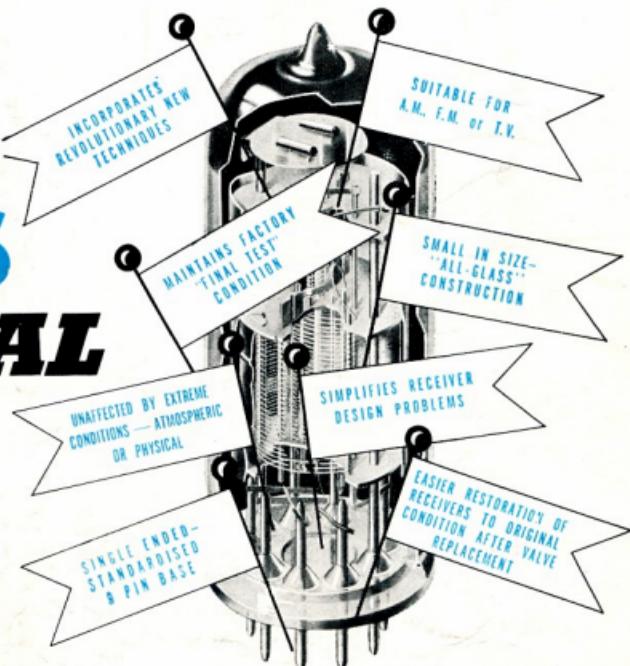
JOURNAL OF THE WIRELESS INSTITUTE OF AUSTRALIA

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EDITORIAL



Two years ago your Federal Executive, through the F.I.A. T.S., completed arrangements with Dr. Green, of the Commonwealth Ionospheric Prediction Service, for the publication in "Amateur Radio" of Monthly Prediction Charts, specially prepared for the magazine and covering Amateur Bands. The service was to be provided for a period of six months, in return Dr. Green requested that Amateurs using the service collaborate by submitting summaries of their reception data for research purposes.

We quote extracts from letter recently received from Dr. Green—"No report on the usefulness of the predictions has ever reached this service, although the original trial period of six months has, of course, long since expired. As a result, we have been compelled to rely on other sources of information for the purpose of checking the predictions for the Amateur Bands and the benefit of these checks has been automatically passed on to the Amateurs in the form of improved forecasting techniques . . . It is to be regretted that the Amateurs who have made many contributions to the

progress of high frequency radio communication, have so far failed as a body to assist with the progress of the new art of ionospheric forecasting."

Federal Executive is astounded at the lack of reports in view of the fact that the service is obviously popular and well used as evidenced by Federal Council's directive to F.E. based on members' opinions, to request continuation of the service. However, before having the temerity to request continuation of the service for the third year we would like to be able to offer Dr. Green concrete evidence of the gratitude we feel towards him and his staff. YOU can help by jotting down your observations every month and forwarding same to your Divisional I.A.T.S. officer, whose duty it is to collate the information and pass it on to Dr. Green.

We are confident that the Amateurs are capable of far more co-operative effort than hitherto displayed, and we are sure that the Australian sense of fair play will not permit members to go without accepting a gratuitous service without making some endeavour to reciprocate.

FEDERAL EXECUTIVE.

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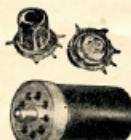
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THE VK3WI ARRAY FOR 144 Mc.

BY LEN JACKSON*

The problem recently arose of providing an antenna for the projected Two Metre Transmissions from the Club Rooms, Queen Street, Melbourne. A consultation between VK3IM, VK3LH, and the writer was held to decide on a suitable type and resulted in the following specifications:—

- The antenna should be omni-directional, of turnstile or suitable type.
- It should consist of not more than two bays, to limit the size.
- It should have the highest possible gain consistent with the above two specifications.

The writer was of the opinion that this could best be achieved by using the same principles of feeding and phasing as were used in the "Lenfo" Series Phased Array (see January "Amateur Radio," 1950), and undertook the development and construction of a suitable antenna. The result has fulfilled all expectations.

Although not quite a perfect circle, the pattern is excellent and the gain in the region of 6 db over a dipole (in the most favourable direction of the dipole), compared with about 1.3 db for a two-bay turnstile of conventional type.

The array consists of four elements, two in each bay placed at right angles to each other, the two bays being stacked slightly over four feet apart (see Fig. 1).

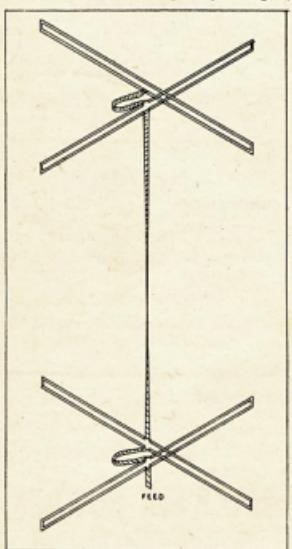


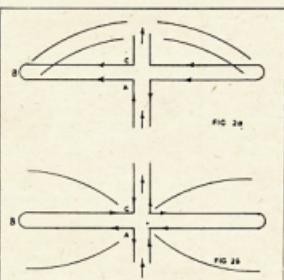
Fig. 1.

Isometric view of elements, 300 ohm ribbon phasing section, and feed line.

* 8 Austin Street, Bentleigh, S.E.14, Vic.

The feed line is 300 ohm ribbon, as are also the phasing lines between elements. The elements have the appearance of folded dipoles, with the feed line attached to the centre of one leg; the feed line to the next element being taken from the centre of the other leg. It should be noted that the first three elements have the appearance only of folded dipoles, their behaviour being quite different.

In view of the controversy and criticism aroused by the dimensions of the "Lenfo" beam, it might not be out of place to review here briefly the theory of the series phased array, before proceeding further.



Referring to Fig. 2a, the radio frequency currents generated by the transmitter travel along the feed line towards point "A" forming travelling waves on the line. At point "A," at say the positive peak of a cycle, the instantaneous currents have the direction indicated by the arrows. At point "B" which is a quarter wavelength further along the direction of travel, the current is at zero. A further quarter wavelength brings us to the point "C" which is at the negative peak of the previous cycle. Since the direction of travel has been reversed at the end of the element, and the current is also reversed, due to the half cycle time lag in traversing the element, the currents at points "A" and "C" will be in the same direction, and therefore add.

A quarter of a cycle later, the currents will be as shown in Fig. 2b. Here points "A" and "C" are undergoing reversal of current, so there is no current flowing. At point "B," which is at maximum current, the currents in the two legs of the element are flowing in opposite directions, and therefore cancel. The result is therefore as though there were no current flowing in the element. A quarter cycle later again, the currents have the same distribution as in Fig. 2a, but are now flowing in the opposite direction. The net result therefore, is as though there were standing waves on the element, and the same radiation is produced, although actually, only travelling waves appear on the conductors.

It will be seen that the important dimensions on these elements is the distance from "A" to "C," via "B," since this must be exactly a half wave length to provide the required reversal of phase. However, since "A-B-C" constitutes a single turn loop, the self inductance and capacity will be somewhat higher than on a straight wire, thus reducing the speed of travel.

In practice, this dimension should be 0.9 of a half wavelength, or $443 + \text{freq.}$ It should be realised that the action is very different to the usual antenna and calculation by antenna formulae will result in an element which is too long. The impedance of these elements is 300 ohms, so the use of 300 ohm feed and phasing lines is essential to prevent standing waves.

To produce a circular radiation pattern, it is necessary to use two elements, placed at right angles with the centre of one immediately above the centre of the other, and feed the two with a phase difference of 90°. This is quite easily achieved by connecting the two by a quarter wavelength of feed line, the required phase delay being provided by the time taken by the currents to traverse this length of line. Due to the high dielectric constant of the polyethylene insulation used on 300 ohm ribbon, the speed of travel is again lower than in space, and hence the line will be shortened by a factor of 0.8.

The final array is constructed as follows: The feed line is taken to the centre of the lowest element, which measures 36 $\frac{1}{2}$ " from points "A" to "C," via "B," as in Fig. 2. The actual spacing of the two legs is not important, provided it is small. From the centre of the first element, a quarter wavelength of feed line, 16 $\frac{1}{2}$ " connects to the centre of the second element placed immediately above, and at right angles to the

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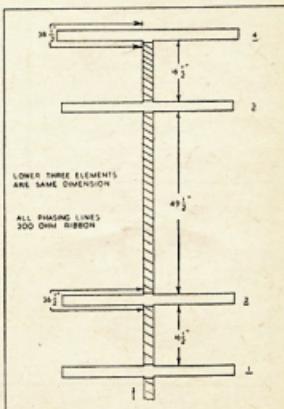


Fig. 3.

Painless Extraction of Harmonics

BY F. DICKSON,* VK2FB

It is one thing to read in a book that you can measure very high frequencies by means of a high frequency heterodyne wavemeter, using its harmonics, but it is quite another matter to do this in practice. Only too often there is no telling which harmonic one is hearing or even if it is a genuine harmonic at all. Furthermore it is disconcerting to find that some harmonics are stronger than expected while others are extremely weak. In fact, to do the job with any assurance of success, one must already have quite a fair idea of what the unknown frequency is, but unfortunately, this is not always the case.

There is quite an easy way of getting over this, a simple arithmetical juggling, which settles the question of which harmonic is being heard.

We need a wavemeter which will put out harmonics in the band in which we are interested and a detector or receiver which will let us hear the beats between its harmonics and the oscillator being measured.

The first step is to get a beat with some harmonic or other, note the wavemeter frequency and then shift it to the next higher frequency which gives a beat, and preferably a third, the next higher frequency again. Now the unknown frequency is a multiple of all these three known frequencies and we can find unambiguously the harmonic numbers of them.

Let us call the lowest frequency we took f_1 , the next f_2 , and the third f_3 . The unknown frequency, F , can be put down as

$$F = nf_1$$

where n is the harmonic number.

As f_2 was the next higher frequency which gave a zero beat, its harmonic will be 1 less, so we have

$$F = (n-1)f_2$$

and likewise, if we want a check to make doubly sure

$$F = (n-2)f_3$$

From two of these equations we can find the value of "n" thus,

$$(n-1)f_2 = F = nf_1$$

therefore $(n-1)f_2 - nf_1 = 0$

and $nf_1 - f_2 - nf_1 = 0$

We can tidy this up to get

$$nf_1(f_2 - f_3) = f_2$$

so that $n = \frac{f_2}{f_1 - f_3}$

As we know f_1 and f_2 , "n" is easily found and we know which harmonic of f_1 we were hearing, and similarly which harmonic of f_3 .

In the same way we can tell which harmonic of f_1 was picked up, if we took the trouble to observe one. It is a good idea to take an extra point or two in the first rough check because in some oscillators various harmonics are extremely weak and we may have missed a beat, and perhaps what we took for f_2 is really f_3 . By noting several of these "f"s, we can tell if one has been missed because the gap between the two where one has been missed would be much bigger than between the others and would be clearly shown.

Usually once the harmonic characteristics of the oscillator are known, the additional points are not necessary.

If an oscillating detector is used to observe the beats, or a superhet receiver, there may be some additional beats, but these can be distinguished because as they are with harmonics of the detector they would give wavemeter points much too close together, being several orders higher in frequency, and will normally be weak, so there is no trouble in distinguishing them.

Quite often it will be found that "n" does not come out as a whole number, which it obviously should be, and this is due to errors in the calibration or reading of the wavemeter and the nearest whole number is taken. If the value of "n" is much different from a whole number, it is high time to check the wavemeter calibration.

Now let us take an example of the method. We have an oscillator which we hope will put us in the 144 Mc. band and the i.f. is 20 Mc., so that the oscillator will have to lie between 144 and 148 Mc. We turn on the old faithful R/S receiver as our detector and that heterodyne wavemeter we built (or acquired) a couple of years ago. As the calibration is quite good around 7 Mc., we will operate in that region and the results of our heterodyning give us:

$$f_1 = 6.725 \text{ Mc.}$$

$$f_2 = 7.124 \text{ Mc.}$$

$$f_3 = 7.570 \text{ Mc.}$$

From f_1 and f_2 , by the little formula, we get:

$$n = \frac{f_2}{f_2 - f_1} = \frac{7.124}{7.124 - 6.725} = 17.84,$$

so we can call it 18, and making a check with f_1 and f_3 we have 16.97 which we call 17, and the oscillator under test is therefore said to be:

$$18 \times 6.725 = 121.050 \text{ Mc. according to } f_1 \text{ and}$$

$$17 \times 7.124 = 121.108 \text{ Mc. according to } f_2 \text{ and}$$

$$16 \times 7.570 = 121.120 \text{ Mc. according to } f_3.$$

Now the figures for "n" were 17.84 and 16.97, and as the latter is rather closer to a whole number, we decide to use f_2 and f_3 rather than f_1 as they are probably more accurate. Averaging the value of F from f_1 and f_3 , we get $F = 121.114$.

It happens that the oscillator actually measured in this case was a crystal oscillator about 3.028 Mc., with harmonic amplifier and the real value of F was 121.115 Mc.

This meant that we were multiplying 40 times instead of 48 which would have put us in the band at 145.339 Mc. As a measurement the result was quite good, but it shows that the wavemeter calibration could be improved around 6.7 Mc.

Since we now have an unambiguous method of using harmonics, we can set about v.h.f. measurements with complete confidence about the harmonic order and have only to worry about the accuracy of the wavemeter used.

It is also to be noted that if we have access to a number of accurately known v.h.f. frequencies, we can reverse the

above process and calibrate our heterodyne wavemeter from them with great accuracy.

One further point is worth mentioning, this general scheme also works out for determining low frequencies by the inverse method. Suppose we want to fix a frequency around 60 Kc., we can use broadcast station carriers instead of v.h.f. carriers and calibrate a l.f. oscillator very nicely indeed. Obviously, for a rough check one can use the fact that the interval between successive harmonics of the l.f. oscillator heard in the B/C band is equal to its frequency.

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VK3WI ARRAY FOR 144 Mc.

(Continued from Page 3)

first. Three-quarters of a wavelength of line, $49\frac{1}{4}$ feet, then connect to the third element, which is parallel with the first, and spaced the length of the feed line above the second. This length of line is required to bring the first and third elements into phase, while the spacing is about right for optimum gain.

Another quarter wavelength of feed line connects the third and fourth elements, which are placed the same way as the first two. The fourth element is required to terminate the line with an impedance of 300 ohms and hence takes the form of a standard folded dipole, $38\frac{1}{2}$ feet long. All the dimensions have been calculated for the centre of the band (144 Mc.), the array being very broadband, covering the entire band with ease.

Since elements one and three must be in phase, also elements two and four, care must be taken to connect the phasing lines the right way since reversal will result in a pair of elements being out of phase.

This is quite simple if carried out as follows: The elements are laid out and connected as shown in Fig. 3, the same wire in the phasing line connecting to the left hand side of the element at

each end. Elements two and four are then rotated in the same direction, until they are at right angles to the other two. Elements one and two are then moved up together as close as practicable, also elements three and four, while two and three are separated by the length of the phasing line between them. The array is then mounted so that all the elements are horizontal, with three and four vertically above one and two.

Although a certain amount of experimental work was entailed in the development stages, the final array was built up in the manner and to the dimensions described, no tuning or adjusting of any description being necessary. If the instructions are followed carefully, no difficulty should be encountered by anyone wishing to duplicate this array.

It proved impossible to make field strength measurements in a suburban back yard, reflection from clothes lines and other conductors having a very great effect upon the pattern. Therefore testing had to be confined to checking under actual operating conditions; the theoretical predictions for gain, etc., being very well borne out.

For the foregoing reason, it is recommended that the array should be mounted as high as possible, well away from any other conductors, such as other aerials, roofs, guy wires, etc.

In conclusion the writer sincerely thanks VK3 3FO, SABA, 3EM, 3EN, 3DY, John Dawes and particularly Herb Stevens, VK3JO, for their valuable co-operation and able assistance in the testing of the "VK3WI Array."

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* The 10 metre coupler is substantially flat over the band 28.0-29.0 Mc. Usable drive, however, is provided up to 29.7 Mc.

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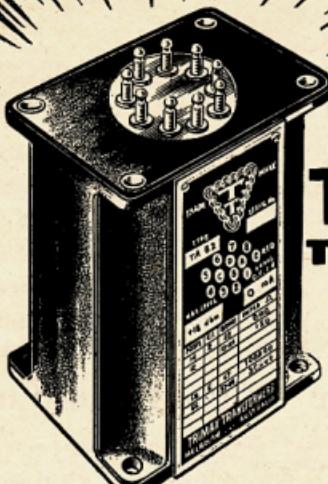
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DX NOTES BY VK4QL

The month of September was one of varying fortunes and effective blanketing by the "Ion Curtain," which resulted in generally very poor conditions on all bands except for Friday and Saturday, 16th and 17th, when the 14 Mc. band was wide open. Other bands, including 28 Mc., showed some improvement, but not to the same extent. From then on the whole of the high frequency bands deteriorated, until at the end of the month, very few signals of any note and strength were getting through.

Despite the poor conditions some things of note occurred. Firstly, from my own personal angle was the working of DL1IFF on 7 Mc., thus completing my 7 Mc. W.A.C. Secondly, the ease with which South Africans were worked on 7 and 14 Mc. for the first three weeks of the month. On 14 Mc., VQ8 and ZS stations were workable at 9 p.m. E.S.T., whilst on 7 Mc., a number of ZS, VQ2GW, ZE2JL, CR7AJ were worked between 6 and 7 a.m. In the 4W1 broadcast on 9th September, it was said good signals, up to S9, were received from Europe in Brisbane. There was no trace of those signals here, nor of the VKs working them. Very few Europeans were heard on 7 Mc., but southern stations seemed to be working them OK. KV4AA and KP4CC were operating on 7 Mc. in the evenings, at times better strength, than the few W signals getting through.

Some very "tasty" DX was heard on 14 Mc. this month, but a lot of it got away. The calls included 3V8BD, Y16DB, SV0WWM, GC3ZU, AP2X, 4X4CR, ZD6EF, 4X4CL, ZD4AB, VQ8AD, VQ8CB, IS1CNG, IT1KB (Sicily), PK5JT, ZC4CHV, VP1AA, VP6CDI, VP7NMM, C3KS (Formosa), ZX2AA, ZM6AK, 9S4AL, FF8JC, OG5AS. FF8JC was worked at good strength at 7 a.m. with good strength each way, yet no other readable sigs were on the band. Activities this month have been quite restricted, so there may have been other openings, with the consequent good DX getting through. It's just a matter of being around when those things happen these days.

ZS licensees have now reached three letter calls, so there must be quite an increase in calls being issued. Increased activity was also observed from VU stations during this month.

One thing occurred on the band one night which I never expected to see. It was the fruitless CQs of John, VK1PG. I think he eventually gave it away without a QSO.

Some of us heard an interesting "duel" between W6AM and TA3GVU on 14 Mc. one afternoon. W6AM apparently wanted to get a new country on phone and tried all he knew to get TA3GVU to go in the phone band for him. After a number of "pleading" overs, TA3GVU said, "Nothing doing," and sent QRZ without listening further for W6AM! A number of VKs then benefitted from a TA QSO and made comment on what had taken place.

The commercial interference on 14 Mc. seems to have increased, while on 7 Mc. it is extremely hard to find a clear spot without a commercial spreading over the frequency. 4TU had an

experience on 7 Mc. one night, when a commercial told him to "GET." We wouldn't object if some of them took that to heart instead.

What is now routine for Dave, 2EO, is the winning of the 1950 A.R.R.L. DX Contest, with 2GW and 5FM 2nd and 3rd respectively.

I had hoped to hear from some of the Interstate DXers this month, to let me know what had been happening in other States, but the only info is from 3CX, who is trying to organise himself sufficient QSLs for his W.A.P. Award. Alan has 133 countries worked and 1122 confirmed. Incidentally, the W.A.P. Certificate is quite attractive and well worth getting. Things got a bit out of hand in the issuing of the Certificates recently, but ZL2GX has again taken over the reins and promises better service. This Certificate is going to be a little harder to come by these days with some of the required prefixes disappearing off the bands. [See "A.R." March, 1949, p.16, and May, 1949, p.12, for rules—Ed.]

QSLs of the best picking this month received by 4TU and 4QL were ZD4AM, PK3JT, NY4DD and VR4AD plus UBS and U18. That's about all for this month, but "please, oh please," let me have some news of what ticks round VK.

• The thought for the month, prompted by a remark from ZD4AD: "If a station sends, with his CQ, QLM, HM, US or D10, it means 'Do not reply on my own frequency'."

DX C.C. LISTING

PHONE

Call	No. Ctrs.	Call	No. Ctrs.
VK4JD	1 1 148	VK4KS	9 121
VK4EB	10 148	VK4EP	8 114
VK4ZJ	4 141	VK4WW	14 104
VK4SKW	2 120	VK4WV	13 104
VK4RU	2 138	VK2SAHA	15 102
VK4DD	6 126	VK3IG	5 100
VK4LN	11 125	VK3JE	7 100
VK4HR	12 125		

CW

Call	No. Ctrs.	Call	No. Ctrs.
VK4BZ	7 126	VK1LZ	1 102
VK3EO	2 152	VK3EJ	21 101
VK4CN	1 151	VK4BO	13 107
VK3PH	5 141	VK2GW	16 107
VK3QL	5 141	VK5RX	23 106
VK4ZJ	4 140	VK3R	27 105
VK4ZL	9 140	VK3EJK	10 105
VK3EB	10 138	VK5PFH	31 105
VK4SA	28 126	VK3JJ	25 104
VK4HR	8 131	VK4FJ	20 102
VK4ZJ	11 131	VK3AJA	11 101
VK4BU	18 125	VK3AJ	19 101
VK3EK	3 122	VK3CX	26 101
VK3UM	12 116	VK7TRX	22 100
VK4DA	7 113	VK7L	24 100
VK4DO	20 113		

OPEN

Call	No. Ctrs.	Call	No. Ctrs.
VK4BZ	4 262	VK5DF	26 114
VK4BU	2 262	VK4LDF	1 114
VK3KX	1 167	VK4HO	21 110
VK4HR	7 167	VK3ZB	34 110
VK3HG	3 166	VK2ZC	25 108
VK4SKW	13 161	VK3YL	11 108
VK3UM	10 159	VK3YH	10 106
VK3EJ	12 154	VK3JH	33 105
VK4EL	10 140	VK3AWN	36 105
VK4DO	15 140	VK2VN	18 104
VK3MC	5 139	VK4UL	27 104
VK3OP	21 137	VK4L	1 104
VK3P	19 137	VK7EB	20 103
VK4DD	22 134	VK2TI	37 103
VK2ADE	28 133	VK3HO	38 103
VK3AHA	9 128	VKTR	31 102
VK3SN	20 128	VK4TY	35 102
VK3EN	15 128	VK4ACK	6 100
VK4FJ	32 120	VK7TG	39 100
VK7LZ	23 116		

IONOSPHERIC PREDICTIONS FOR THE AMATEUR BANDS

NOVEMBER, 1950

Nine of the charts, prefixed by the letter "C" for Canberra, refer to forecasts for the South-Eastern Australian States. The remainder, prefixed by the letter "P" for Perth, are for Western Australia.

The Canberra charts refer to the following world zones:—

Zone Region Terminal

1	Western Europe	London
2	Mediterranean	Cairo
3	N.-West America	San Francisco
3a	N.-East America	New York
4	Central America	Barbados
5	South Africa	Johannesburg
6	Far East	Manila

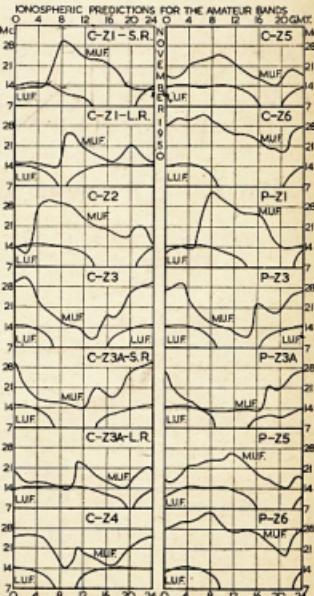
The Perth charts are similar to those based on Canberra.

QUIZ

The Prediction Service welcomes comments on the accuracy of its predictions. In particular, answers to the following questions on the Canberra-San Francisco circuit would be useful:

1. Were good conditions experienced on 7 Mc. for the period 0700 to 1600 hours G.M.T.
2. Was the 14 Mc. band workable between 1100 and 1600 hours G.M.T.?
3. Was the 28 Mc. band workable for several hours around midnight G.M.T.?

Answers to the Quiz should be sent to the W.I.A. and should, if possible, refer to consistent results obtained on the majority of days in the months.



W.I.A. 1951 NATIONAL FIELD DAY

GENERAL RULES

1. The National Field Day Contest of the Wireless Institute of Australia will be held over the week-end of 27th and 28th January, 1951, and will commence at 1500 hours E.A.S.T., Saturday, 27th, and continue through until 2359 hours, Sunday, 28th.

2. The Contest is limited to portable stations operating within the Commonwealth and its mandated territories on a power not exceeding 25 watts with the antenna connected.

3. A portable station, for the purposes of the Field Day, is defined as one whose power is not obtained from either private or public mains, shall not be located closer than five miles to the home location of the operator(s), and shall not be situated in any occupied dwelling.

4. No apparatus is to be set up or erected on the site of the portable station earlier than 6 (six) hours prior to the commencement of the Contest. A station may be moved from one site to another within the same State during the period of the Contest.

5. More than one operator may be used in the operation of the portable station, provided that all operators are licensed Amateurs.

6. Operation may be on any of the recognised Amateur bands, and more than one transmitter may be used, providing only one transmitter is used at any one time.

7. When calling, c.w. stations will use the call "CQ FD" and phone stations will use the call "CQ Field Day," to indicate they are portable stations. Attention is directed to the requirements for portable station operation as defined in the P.M.G.'s Handbook for the guidance of Amateurs Operators.

8. SECTIONS.—The Contest is divided into 3 (three) sections, namely,

open, c.w. and phone. The Open Section shall consist of both phone and c.w. operation. Participants may enter for all sections providing a separate log is entered in each case.

9. LOGS.—Logs must be forwarded through the Division to reach Federal Executive not later than the 20th February, 1951, and decisions of Federal Executive in all matters relating to the Contest will be final.

10. The operator(s) will choose the most suitable 24 hours of operation from the total operating time of 33 hours, and submit this 24 hours' period as their log for the Field Day. Any lesser period than 24 hours may be operated.

11. Logs must show the location of the portable station(s), names and call signs of the operator(s) in the party, a description of the transmitter(s), receiver(s), antenna(e) and the power supplies. The power input to the final stage(s) with the antenna(e) connected (which must not exceed 25 watts) will also be shown.

12. Log entries are to be in the following order: Date, time (E.A.S.T.), station worked, Amateur band used, report sent, report received, contact points claimed, bonus points claimed, QTH of station worked, and portable operator's call. A summary at the conclusion of the log will facilitate checking.

13. The completed log must be signed by each of the operators with a statement that the P.M.G. Regulations and the Rules of the Contest have been observed.

14. SCORING.—For the purposes of the Field Day, the following constitute separate VK districts: VK2, VK3, VK4, VK5 (South Australia), VK5 (Northern Territory), VK6, VK7, and VK9.

15. A complete exchange of report and QTH is necessary before any points can be claimed.

16. Points will be awarded as follows:

(a) For contacts with a fixed station within the Commonwealth (Rule 14)	1
(b) For contacts with other portable stations in the Contest within the same State	2
(c) For contacts with stations in Asia, Nth. America, and Oceania (outside the Commonwealth, Rule 14)	3
(d) For contacts with stations in Europe	5
(e) For contacts with stations in Africa and South America	7
(f) For contacts with other portable stations in the Contest outside the State	10
(g) A bonus for each Continent worked on each band. For Oceania, the contact must be outside the Commonwealth (Rule 14), add to the final score	25
(h) A bonus for each new State or Country worked on 50 Mc. add to the final score	25
(i) A special bonus for each Interstate or Overseas contact on 144 Mc. and above, add to the final score	50

17. AWARDS.—An attractive certificate will be awarded to the outright winners in each section, namely, open, c.w. and phone. Certificates will also be awarded to the winner in each State in each section. Further certificates can be awarded at the discretion of Federal Executive. The outright winners are not eligible for the State awards.

18. Certificates will be awarded to each operator of the winning stations provided each operator has contacted at least 25% of the stations contacted.

19. In addition to the certificates for the outright winners, an order to the value of 3 guineas, to be divided between the place getters in each section, will be awarded for the purchase of a trophy or equipment.

DIVISIONS ARE ASKED TO ORGANISE STATE TEAMS TO ENSURE ACTIVE PARTICIPATION BY ALL STATES IN THE NATIONAL FIELD DAY CONTEST.

4th All-European DX Competition, 1950

Contest Calls.—European Amateurs will call stations in the remaining five continents by "CQ AW" (CQ All World)—stations outside of Europe will use "CQ EU" (CQ Europe).

RULES

1. Eligibility.—Amateurs operating fixed Amateur stations in any and all parts of the world are invited to participate.

2. Object.—Amateurs of all European countries will try to work as many Amateur stations in remaining five continents as possible under the rules and during the contest periods.

Amateurs outside of Europe will try to work as many European Amateurs as possible under the rules and during the contest periods.

3. Conditions for Entry.—Each participant agrees to be bound by the terms of this announcement, the regulations of his licensing authority, and the decisions of the S.S.A. Award Committee.

4. Entry Classifications.—Entry may be made in either both the CW or Phone sections. CW scores are independent of Phone scores. Entries may be made only by single-operator stations at which one person is present. Multiple-operator stations, including those obtaining any assistance from further persons are excluded from participation. Competition takes place on the following bands: 3.3, 7, 14, 28 and 50 Mc. in both the CW and Phone sections.

5. Contest Periods.—There are two week-ends, each 48 hours long; one for CW work and one

for Phone. The CW section starts at 0001 GMT, Saturday, 25th November, 1950, and ends at 2400 GMT, Sunday, 26th November, 1950. The Phone section starts at 0001 GMT, Saturday, 2nd December, 1950, and ends at 2400 GMT, Sunday, 3rd December, 1950.

6. Valid Contacts.—In the telegraph section, all claimed credits must be made both ways on CW. In the Phone section only voice-to-voice contacts count.

7. Exchanges.—Each participating operator will check three figures in a self-assigned number. CW contestants will exchange five-figure numbers, consisting of an RST report plus the three self-assigned numbers. (Examples are given in the sample log.) Phone contestants will exchange five-figure numbers, each consisting of a Readability-Strength report plus the three self-assigned numbers. The self-assigned number remains the same during the whole contest period in either or both the CW and Phone sections.

8. Scoring.—(a) Points: Every European station earns 1 point upon receiving acknowledgement of a number sent. 1 point upon acknowledging a number received. Stations outside Europe earn 2 points upon receiving acknowledgement of a number sent, and 1 point upon acknowledging a number received. Each contestant in any part of the world can therefore earn at least 3 points for each contact.

(b) Final Scores: European stations multiply the total points earned under Rule 8a by a multiplier

which is the sum of all non-European countries worked on each band. Countries will be those on the A.R.R.L. Countries list valid at the time of the contest, with the exception that both the W and VE licensing areas count as a separate country. There are 15 licensing areas: 10 in the United States and 5 in Canada.

Stations outside of Europe multiply total points earned under Rule 8a by a multiplier which is the sum of all European countries worked on each band. However, only those European countries will count which are on the A.R.R.L. Countries List valid at the time of the contest. All W and VE licensing areas compete separately.

9. Repeat Contacts.—The same station may be worked again for additional points if the contact

Famous Last Words

"The Contest starts in two minutes and I haven't got any grid drive."

is made on a different frequency band. The same station may be worked again on the same band only if the complete exchange for a total of three points was not made during the original contact on that band.

10. **Quotas.**—Any European contestant may, in the CW section, work the maximum of three different stations in any one V.H.F. (V.H.F. license area) outside of Europe on each band. Thus the maximum possible number of points which can be earned per country per band is 9. There is no such restriction for stations outside of Europe, so that they may work as many European stations as possible.

In the Phone section of the competition, the number of contacts with any country, respecting Rule 10, is restricted for neither European nor non-European stations.

11. **Reporting.**—Contest work must be reported as shown in the sample form which may be found to include the signed statement as shown in the example. Contest reports must be mailed no later than 31 December, 1950, decisive being the date of the postmark. Reports received after 30 April, 1951, will not be considered. All reports are to be sent to the address: SM6ID, S.S.A. Contest Committee, Postbox 609, Gothenburg 6, Sweden.

12. **Awards.**—(a) Suitable certificates will be awarded to the first three amateurs attaining the highest score in each country and each W and VE licensing area.

(b) Certificates will be awarded separately for work in the CW and Phone sections.

(c) Contest results will be sent to the International Amateur Radio Union for publishing in "QST" as well as to Amateur Societies in each country.

13. **Judges.**—All entries will be passed up by the S.S.A. Award Committee, whose decisions will be final.

14. **Disqualifications.**—Off-frequency operation will disqualify. Low tone reports in logs will also be considered by the S.S.A. Award Committee as grounds for disqualification.

LOG FOURTH ALL-EUROPEAN DX COMPETITION (Logs from Europe, for each band)

CW Entry
Call
Name
Address
Antenna(s)
Transmitter Tubes
Plate Watts (input last stage)
Number Hours Station Operation

Band	8.5	7	14	28	56	Total	Different Countries Worked
No. DX Stations Worked	2	4	6	1	—	13	
No. Countries Worked	2	4	5	1	—	12	11

(Logs from points outside of Europe indicate, for each band, in the above part of the log: the number of European stations "QSOed" and the number of European countries "QSOed".)

Date and Time GMT	Station Worked	Country	Worked Record of each freq. Band Mc.						Numbers Exchanged		Points
			8.5	7	14	28	56	Sent	Received		
Nov. 25— 00.05	W2MV	USA2	1					570555	569777	3	
01.47	VE3BG	Canada3						469555	569123	3	
00.15	KP4HU	P.His.						580555	580000	3	
05.15	W7FY	USA7		1				570555	469678	3	
06.29	VE3AL	Austr.						589555	589777	3	
10.54	VE3SG	SSGR						599555	591111	3	
Nov. 26— 03.35	W1DHD	USA1	1					459555	?	1	
04.15	VE3AV	Cuba		4				686555	468990	3	
17.46	2360UK	U.K.			3			586555	586666	3	
20.53	LU1AA	Argent.						599555	593233	3	
20.58	VE3AV	Austr.			4			449555	349555	3	
21.17	W2PCL	USA2				5		599555	589000	3	
28.55	W4ML	USA4		2				359555	?	1	

Total Points—25

Multiplier: 2 plus 4 plus 5 plus 1—12
Final Score: 85 (points) multiplied by 12 (multiplier) = 420

(Logs from points outside Europe can contain in the above part of the log only European Stations.)

I certify, on my honour, that I have observed all competition rules as well as all regulations established for Amateur Radio in my country, and that my report is correct and true to the best of my belief. I agree to be bound by the decisions of the S.S.A. Award Committee.

Operator's Signature.

NOVEMBER SPECIALS!

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- Steane's Ribbon Mike and Stand £6/10/-

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Useful Workshop Hints

By N. E. COXON,* VK5AG

Miss print W.E. Coxon

Keep a container in which to drop all odd nuts, screws, etc., that are come by from junk, alterations, or off the floor. Then, apart from a valuable source from which to find that odd screw, etc., periodically the container can be emptied into respective screw and nut compartments.

Sheet aluminium is best divided by nicking and breaking. Have an 18" length of 1" angle iron held together by 2 x 1" bolts at the ends to form a clamp. Mark the line to sever, clamp and hold in vice, cut with point of a strong penknife, and bend several times, and the break is clear, straight, and no twists in the aluminium.

Tinned copper wire used as bus bar often is tarnished when bought. To clean, rub with a wire file brush, and to straighten, hold end in vice and hold other end in flat nosed pliers. Give a sharp jerk and the wire is straight.

Whenever a screw is shortened by cutting with pliers, always file off the burr, for you never know when it will be necessary to remove the nut, and no end of difficulty is experienced when a screw head has been chopped off. Brass screws are bad enough, but steel screws treated in this way are time wasters.

When tapping sheet metal, it is safer to hold and tap the hole by using the tap (1/10th" to 5/32nd") in a wheel brace.

Paint with various bright colors, handles of small screw drivers, tight spanners, and various other tools. It makes them easy to find when bundled together on the bench (not always as tidy as desirable).

Keep a small bottle of thin oil with a wire dipper handy. Many a nut, wood or iron screw is coated along by a little lubrication.

When a small drill is broken, insert and solder the broken portion into a shank. It makes a more robust drill, and uses the portion with the best cutting section. The contributor has often deliberately broken off 1/4" from a small drill to fit it to a larger shank. Solder is quite sufficient to hold it.

Wheel braces will take several size larger drills if the shanks are filed with three flats. By such means a 1" drill can be made to slip into a wheelbrace made for 3/16" shanks. The flats also prevent the drills slipping in the jaws.

* Leithdale Road, Darlington, West. A.

FEDERAL, QSL, and



DIVISIONAL NOTES

Federal President: W. R. GRONOW (VKJWG); Federal Secretary: G. M. HULL (VKJZS), Box 2611W, G.P.O., Melbourne.

NEW SOUTH WALES

President.—J. Corbin, VK2YC.
Secretary.—David H. Duff (VK2EO), Box 1734
G.P.O., Sydney.

Meeting Night.—Fourth Friday of each month at Science House, Corner Gloucester and Essex Sts., Sydney.

Divisional Sub-Editor.—A. C. Pearce, VK2AHR, 131A Balmain Rd., Leichhardt, N.S.W.

Zone Correspondents.—Nth. Coast & Tablelands: J. M. Retaliack, VK2XO, Raleigh; Newcastle: H. Whyte, VK2AHA, Vale St., Birmingham Gardens, Newcastle; Coalfields and Lakes: H. Hawkins, VK2XO, 27 Comfort Ave., Lakemba; Western: H. H. Stettinius, VK2SWH, Comboyura, Forbes; South Coast and Southern: H. R. Rayner, VK2DO, 42 Pettitt St., Yass; Western Suburbs: C. Pearce, VK2AHR, 131A Balmain Rd., Leichhardt, East Sydney; Waverley: D. B. Knock, VK2NO, 29 Yarrow Avenue, Waverley; North Sydney: L. D. Cuffe, VK2AM, 779 Military Rd., Mosman; St. George: J. A. Ackerman, VK2ALG, 22 Park Rd., Carlton; South Sydney: H. W. Wilson, VK2VW, Cr. Willson St. and Marine Pde., Manly.

VICTORIA

President.—G. S. G. SCHOONER, VK3GS.

Secretary.—C. Dyer (VK3ADY), 19 Collington Ave., Brighton (Xa 6262).

Administrative Secretary.—Mrs. S. May, Law Court Chambers, 191 Queen St., Melbourne, C.I.

Meeting Night.—First Wednesday of each month at the Radio Room, Melbourne Technical College.

Zone Correspondents.—Melbourne: O. C. Waring, VK3VW, 12 St Kilda Rd., St. Kilda; South Eastern: K. O'Rourke, VK2AKH, Killigrew, Westmire; North Eastern: T. K. Tennant, 18 Harold St., Shepparton; Far North Western: M. Folie, 191 St Kilda Ave., Mirboo North; O. Kellis, VK3AKH, Timbarra; North Western: C. Case, VK3ACE, Cumming Ave., Birchip.

FEDERAL

ECUADOR THIRD-PARTY TRAFFIC

Arrangements have been completed between the governments of Ecuador and the United States to permit the handling of third-party traffic between American and South American countries. Similar arrangements have existed for several years between Americans in the U.S.A., Canada, Chile and Peru.

The agreement provides that no compensation for handling such messages may be accepted directly or indirectly by the Amateurs, and that the messages handled will be of such character as would be ordinarily sent by an other existing means of communication. In the event of a disaster, this latter restriction shall not apply.

This arrangement applies to all the continental and insular territories and possessions to the U.S. and the U.S. territories of Ecuador, Argentina, Chile, the Hawaiian Islands, Alaska, the Virgin Islands and the Panama Canal Zone. It is also applicable to the case of Amateur Stations licensed by United States authorities to United States citizens in other areas of the world.

MISCELLANEOUS COMMENTS FROM VARIOUS MEMBER SOCIETIES OF I.A.R.U.

PERU.—Because of political disturbances that took place last year, the Radio Station Amateur Radio Station license has been denied, in general, to all new applicants. This has resulted, naturally, in a reduction of activities. It is felt that after July an easing of the situation will be experienced.

During the last Earthquake, a time when most of the stations stopped with relaying traffic and by notifying all stations about the cause of the tragedy and requesting that they keep the frequencies of 14160 to 14180 clear for distress traffic, the need for agreement on a common frequency for work was brought home with considerable force.

At a recent meeting of the Radio Club Peruano it was recommended that the band of frequencies from 14160 to 14180 be set aside for that purpose in Latin America and that whenever emergency traffic required, the frequencies 14160-14180 should be the frequencies. Naturally, these frequencies are not available for all normal communications whenever this class of traffic is not handled or necessary. We suggest you make known our ideas on this matter through your office.

WI BROADCASTS

All Amateurs are urged to keep these frequencies clear during, and for a period of 15 minutes after, the official Broadcasts.

VK2WI—**Sundays**, 1100 hours EST, 7196 Kc. and 2000 hours EST 50 and 144 Mc. No frequency checks available from VK2WI. Intra-State working frequency, 7175 Kc.

VK1WI—**Sundays**, 1130 hours EST, simultaneously on 2589 and 7196 Kc. and re-broadcast on 50 and 144 Mc. bands. Intra-State working frequency, 7185 Kc. Individual frequency checks of Amateur Stations given when VK1WI is on the air.

VK4WI—**Sundays**, 0900 hours E.S.T. simultaneously on 3750 Kc., 7196 Kc., 14345 Kc., 52.4 Mc. and 144.138 Mc. Frequency checks are given two nights each week and the time of the announcement during Sunday broadcasts. 7065 Kc. channel is used from 1000 to 1030 hours each Sunday as VK4WI query service to VK4AWL.

VK5WI—**Sundays**, 1000 hours EAST, on 7196 Kc. Frequency checks are given by VK5DW by arrangement only on the 7 and 14 Mc. bands.

VK6WI—**Sundays**, 0930 hours WEST, on 7196 Kc. No frequency checks available.

VK7WI—**Second and Fourth Sundays at 1000 hours E.S.T.** on 7196 Kc. No frequency checks are available.

QUEENSLAND

President.—J. F. Pickles, VK4PP.
Secretary.—W. L. Stevens, VK4TB, Box 638J, G.P.O., Brisbane.
Meeting Night.—Third Friday in each month at the I.R.E. Room, Wickham St., Valley.
Divisional Sub-Editor.—Clive J. Cooke, VK4CC, Kurun Street, Chermside, Brisbane.

SOUTH AUSTRALIA

President.—E. A. Barber, VK3MD.
Secretary.—G. M. Bowen, VK5XU, Box 1234K, G.P.O., Adelaide.
Meeting Night.—Second Tuesday of each month at 17 Westmount St., Adelaide.
Divisional Sub-Editor.—W. W. Parsons, VK5PS, 483 Esplanade, Henley Beach.

WESTERN AUSTRALIA

President.—H. W. S. Hugo, VK5KW.
Secretary.—W. E. Coxon, VK5AG, 7 Howard St., Perth.
Meeting Places.—Padbury House, Cnr. St. George's Ter. and King St., Perth.
Meeting Night.—Third Tuesday of each month.
Divisional Sub-Editor.—Alec A. Smith, VK5AS, 75 Weston St., Carlisle, Western Australia.

TASMANIA

President.—J. Brown, VK7BJ.
Secretary.—R. D. O'May, VK7OM, Box 371B, G.P.O., Hobart.
Meeting Night.—First Wednesday of each month at the Photographic Society's Room, 163 Liverpool St., Hobart.
Divisional Sub-Editor.—S. Excell (VK7SJ), 77 Mollie Street, Hobart, Tasmania.
Northern Zone Correspondent.—R. H. Kirby, VK7RK, 5 Galvin Street, Launceston.

SILENT KEY

VK4RC

It is with deep regret that we record the passing of Bob Campbell (VK4RC) late in September.

NEW ZEALAND.—Amateur transmitting is becoming a more popular hobby daily. Very favourable public reaction during last two or three years due to helpful daily newspaper publicity, consequent upon research and recent work by our Radio Emergency Committee and our amateur radio emergency ideas under the new name of Amateur Radio Emergency Corps, A.R.E.C.

The same factors, plus considerable internal re-organization, is making VK4RT, more popular with all licensed Amateurs as is reflected in our growing membership.

INQUIRIES RE UNION MEMBERSHIP

There have been recent inquiries regarding membership of the I.A.R.U. from Amateur Societies in the Dominican Republic and French Morocco. In neither case has the Society's qualifications yet been established.

W.I.A. ACTIVITIES CALENDAR

Nov. 5: "CO" DX Contest (see Aug. 1950 "Q" for details).

Nov. 25-26: Fourth All-European DX Competition, 1950—c.w.

Dec. 2-3: Fourth All-European DX Competition, 1950—p.s.s.

Dec. 16: Motions for 21st Convention due with Divisional Councils.

Jan. 27-28: W.I.A. Nat. Field Day Contest.

Jan. 19: Convention Motions due in to Federal Executives.

Jan. 31: Motions for Roll of each Division due with F.E.

Feb. 28: Convention Per-Capita due with F.E.; end of Fiscal Year of Divisions.

PROPOSED NEW MEMBERS OF I.A.R.U.

The following have been proposed as members of the International Amateur Radio Union:

- The International Amateur Radio Club, India.
- The Amateur Radio Club, India.
- The Technical Institute of Radio (T.I.R.), Syria.
- F.E. has voted in favour of the above Societies becoming members of the I.A.R.U.

NEW MEMBER SOCIETY

The question of the admission to I.A.R.U. as a new member of Union Congolaise des Amateurs de Radio (U.C.A.R.) was carried by 22 aye votes to 16 nay votes. The U.C.A.R. has been provisionally admitted to membership in the International Amateur Radio Union as the member society for the Belgian Congo and the mandated territory of Ruanda-Urundi.

ADDITIONS, ALTERATIONS, AND DELETIONS TO AMATEUR CALL SIGNS—SEPTEMBER, 1950

ADDITIONS

VK2DY—E. C. J. Fisher, 2 Oxalide St., Warrawong. **2AAW**—D. J. Sibbald, 170 Dunning Ave., Rosebery. **2AAW**—W. A. Richardson, 22 Austral Ave., West Ryde.

2AEA—I. R. W. Allison, 98 Wardell Rd., Dulwich Hill.

2AOA—F. A. Alcock, 7 Denman St., Eastwood. **2AQH**—M. H. Brown, 19 Farmell St., Gladyside. **2AQH**—D. J. G. Goss, 122 Gladyside, Gladyside. **2ARW**—R. W. Allinson, 98 Hastings Pde., Merewether.

2ASE—E. Ashley, 98 Hastings Pde., Bondi. **2ATC**—Sydney Technical College, Ultimo. **2AXC**—E. George, 33 St. Paul St., Port Kembla. **2AXC**—A. Bannister, 9 Akbar St., Port Kembla.

2AK3DO—R. T. Pettigrew, 2 Donme St., West Coburg. **2AAK**—C. S. Hann, 10 Stannom St., East Keilor. **2AAK**—G. J. Nicholson, 101 Powlett St., East Melbourne.

2AAB—R. Phillips, Cititons Park Hotel, 164 Church St., Richmond.

2ABP—R. F. Pounsett, Raglan St., Sale. **2AGI**—D. W. L. Gove, Flat 2, 22 Pine Ave., Elwood.

2AHG—H. Downday, 2 Balmoral Place, South Melbourne.

2AJG—H. J. Gale, Flat 7, 205 Alma Rd., East St. Kilda.

2AJM—H. J. George, 28 Keith St., Parkdale.

2ALV—I. G. Watson, 51 Grey St., St. Kilda.

2ALV—G. Watson, 449 Glenferrie Rd., Malvern.

2APD—J. P. O. Downie, 97 Cole St., Gardenvale.

2ATC—H. J. Cayer, 504 New St., Elsternwick.

2AUO—A. D. Cook, 490 Kooyong Rd., Caulfield.

SAUW—S. D. Wheeler, 21 Caroline St., South Yarra.
 SAYW—E. J. V. Willis, 567 Whitehorse Rd., Surrey Hills.
 SAYW—R. H. Wenborn, 134 Dandenong Rd., Oakleigh.
 SAYZ—R. J. Trevena, 17 Mary St., Essendon.
 VK4EB—P. Bobbelle, 45 Danse St., Greenslopes, Brisbane.
 4KF—K. V. Ford, Old Northern Road, Everton Park, Brisbane.
 4YH—J. Houghton, 82 Abbott St., Cairns.
 VK5DV—D. B. Vaughan, 19 Marion Rd., New Mile End.
 5HL—H. H. Lloyd, 40 LeFevre Terrace, North Adelaide.
 5KP—J. Gray, 5 French St., Broadview.
 5RO—C. A. Moore, 15 Cavendish Street, West Croydon.
 VK7RX—D. A. J. Davis, 3 Crelin St., Hobart.

Alterations—

VK2FU—No. 1 Flat, "Wassimo Court," Addison Rd., Manly.
 2KT—J. S. Jack St., Petersham.
 2PM—30 Marion Gardens, Narrabundah, Canberra, A.C.T.
 2PT—6 Queen St., New Lambton, Newcastle.
 2TJ—Fraser St., Dulwich Hill.
 2WP—C/o. Mr. C. Saywell, 727 Pacific Highway, Manly Point.
 2XZ—75 Laurel Street, Willoughby.
 2ZP—90 Dutton St., Yagona.
 2AB1—8 Rawlinson Ave., Wollongong.
 2AB2—127 Weller St., Wollongong, Wollongong.
 2AGN—"Cavanside," 256 Howick St., Bathurst.
 2AJU—60-70 Elizabeth St., Sydney.
 2APG—C/o. Rossi, Carindra, 4W, N.S.W.
 2ASP—32 Tenter St., West Kempsley.
 2ANB—100 Elizabeth Bay, Sydney.
 VK3MY—17 Devon St., Cheltenham.
 3OW—C/o. E. A. Robinson, Allendale.
 3QJ—149 Ashburn Grove, Ashburn.
 3ZT—3 Dona St., Hughenden.
 3AF—"Softail," Burwood, East Burwood.
 3ACO—3 Mackay St., Brisbane.
 3ADW—7 Salisbury St., Balwyn.
 3AKS—Heatherleigh Place, East Malvern.
 3ANX—Glenelg St. Ave., Payne Vale South.
 3WIA—50 Eighth St., Parkdale.
 VK4DF—Imbres St., Wavell Heights, Brisbane.
 4DN—Hundroo St., Gaythorne, New Farm, Brisbane.
 4ES—49 Kingsholme St., New Farm, Brisbane.

4GM—M.V. "Deli," G/o. Island Industry Board, Thursday Island.
 4GN—"Hollis," Lamington Ave., Doomben, Brisbane.
 4RQ—"Red Dome," Flat 2, Prince Edward Pde., Redcliffe.
 4TW—127 Elizabeth St., Mysterion East, Townsville.
 4ZS—225 William St., Rockhampton.
 VK5WX—55 Marion Rd., Brooklyn Park.
 VK6HJ—3 Coway St., Geraldton.
 9RJ—100 Royalwood Station, 6CL, Collie.
 VK7CP—William St., Queenstown.
 VK9FM—C/o Department of Civil Aviation, Rabaul.

Deletions—

VK2JF—Cancelled.
 2AB1—Cancelled.
 2AGN—Cancelled.
 2ALC—Cancelled.
 2AMN—Cancelled.
 2ART—Cancelled, now operating under VK4YH.
 2ASB—Cancelled, now operating under VK3AJM.
 VK3AJM—Cancelled.
 VK4AM—Cancelled.
 VK4LA—Cancelled.
 VK5WS—Cancelled.
 VK6CH—Cancelled.
 9RJ—Cancelled.
 6TW—Cancelled.
 VK7GD—Cancelled.
 7LH—Cancelled, now operating under VK3AJJ.

FEDERAL QSL BUREAU

RAY JONES, VK3RJ, MANAGER

Due to a typographical error in the incomplete address of the DXer, the following is in section 4 of "Amateur Radio." The complete QTH is: A296, L.A.C. Cromie, W., VK8JG, Transmitting Station, R.A.A.F., Momote, Admiralty Islands.

The present QTH of ex-VK4XO is particularly wanted. VK4XO was QSOed soon after the war and it is believed he went to New South Wales. Anyone knowing his present whereabouts please communicate with this Bureau.

While on the subject of appointments, it is with great pleasure that I read of the appointment as DX Manager of the DXer of the old box number VK3RJ. No longer will there be the time to lay in wait for the unwary DX. Joking aside, a better choice for the appointment could not have been made. Anything "Morrise" undertakes does well, and is always prepared to defend him, energetically, and is abominated of "nouse" to the job in hand. It is hoped that he will continue in the position for many years to come.

Just a reminder of the Fourth All-European DX Contest, scheduled for CW from 0901 GMT, 25th November, 1950, until 2400 GMT, 26th November, 1950, and for Phone from 2nd December, until 08 December, 1950. Times for Phone are similar to the CW. This year the contest is being sponsored by the S.S.A. and the Swedish Amateur Radio Society. Full information as to rules, logs, etc., appear elsewhere in this issue.

A new certificate pops up each month. Here is the latest, "QRV," the independent Amateur Radio Magazine of Box 585, Stuttgart, Germany, has created this latest award for W.E.—Wolfgang All Europe. There will be two sections of the Award, namely, exclusively CW, and exclusively Phone. At present Europe consists of 34 geographically defined countries, 11 islands or groups of islands, and 8 amateur groups. These will form the basis for the award. One point is scored per country on every Amateur band below 30 Mc. (bands between 27/30 Mc. taken as one band). Contacts on bands higher than 30 Mc. count two points. The first 100 points have been scored and necessary verifications received, these should be forwarded to "QRV" for checking and issue of the certificate will follow. If later on your score reaches 150 points, the certificate will be issued. Germany must be worked twice, i.e., once with German nationals, and once with members of the occupation personnel. Contacts prior to 1st December, 1949, will not count. Further details as to country list may be obtained from this Bureau. Interested in this one, VK5KX?

Max Rieper, VK9MR, in high glee after contacting AC4RF phone on 25th September, supplies the following information on frequencies used by AC4RF. VK9MR uses a volt 1000 watt rig on 14400 Mc. When using the HTB 80 watt rig he uses 14240 Mc. Commenting on the VK-ZL Contest, Max states he is building a 10 meter beam constructed of aluminum spars and a 10' x 10' x 10' frame in the style of the Marconi strip. He hopes to have it completed and fired up for the phone section of the Contest. The first week-end of VK section was a fiasco for him as conditions were very poor and power troubles were experienced.

George Luxon, VK5RX, the doyen of QSL Managers, DX hunters and certificate swipers, accepts a challenge thrown down by VK4GG on page 17 of September "A.R.E.," as to whether any other station possessed a QSL from VK. After a diligent search, his VK5X helped VK8XT when Alf Traeger, of undying Australian Island Mission fame and ex-VK5X, was operating VK8XT. George also states that Pete

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Bowman, VK5FM also has all districts including VK5XT. So VK4GG is tossed in two places. Maybe George is right? George recently received the OTU Certificate from the A.R.R.E.L. and now has all the certificates that I only have to prove I have them. He badly needs AC4 for W.A.Z. The dope I have given in the preceding para almost makes a present of it to you George, Yes?

Some QTHs for the DX hounds

VR1B (ex VR1B) B. Schroeder, care P.A.A.
Hamilton Phoenix Group,
CNSJE Jim, Navy 214, Box, F.P.O., New
York, U.S.A.
ZK1BC, Bob, Radio Station, Rarotonga, Cook
Islands.
VV5EZ, Lou, Box 3208, Caracas, Venezuela.
VK4AB, Bruce McLeod, Honiara, Solomon Islands.

Stationing himself to avoid a serve of anti-U.N. propaganda, VR1B is operating a contest with OK1OUR with alleged QTH at Papeete. Operator M. M. at above station heard on several occasions dishing it out at conclusion of QSO. OK1OUR on 14 Mc. end of 14 Mc. with 74 CW.

Welcome back on air to Tommy Lelliott, VR3AZW, ex-VR3ZW who after hibernating for 12 years has come to life again. Mc. C. on from Bowring. During the ride up winkle and winkle. Tommy required time of a wife. When passing along information on to my wife and trying to refresh her memory on VR3ZW, the lady replied, "Is he the chap with the wicked brown eyes?" Tom's wife never worried me any, but the thought she would never allow me to use any "stand-by" refreshments." His return to the scene on the air led to a two-man re-union at the "House of Commons." Tom was one of the pair; guess who was the other.

Felix, PE5AC, advises that at long last the vessel for Wallis and left Noumea mid September, with bits and pieces of the old Bellini radio transmitter. PW5SA should be heard again day now. There is a distinct possibility that Felix will be returning to France early in 1951 and a further possibility of his return to New Caledonia at the end of the same year.

NEW SOUTH WALES

The monthly meeting of the Division was held at Science House, Glebe Point, St. Sydney, on 2nd September, 1950. The meeting opened at 8 p.m. and the minutes of the previous meeting were read, after which, general business was dealt with and sixteen new members admitted to the membership. The Dungog Military Radio Club was one of those admitted; through the personal efforts of Secretary, Mr. Allison, ex-VK1EA, who was accompanied by his mother and Miss Beale, were officially welcomed by the President, Mr. J. M. Corbin, VK2YC, who thanked Dr. Allison for his endeavours in securing films of the Antarctic expedition, of which he was a member. The meeting adjourned, 2WZ then moved that standing orders be suspended, and this was seconded by Dave Evans, 3AEV.

Dr. Allison then assumed a strategic position as darkness prevailed, and a running fire of commentary enlivened those parts of the films which were without sound. Particularly interesting were the scenes of King Island old whaling station, the dead and abandoned ruins. Gropes taken during the erection of the enormous 3000' feet high masts intrigued the audience. These were erected by means of a jury rig and the help of a bulldozer, and since it was impossible to secure enough steel, the girders were made of galvanised filled with rocks were used to keep them up.

Big Ben Peak on Heard Island was most impressive, the more so when the party discovered that the supposedly dead volcano was once again active. Dr. Allison spoke of brilliant aurora in shades of bright yellow and red—the red which turned out to be from the volcano's lava. The party, according to the party, had to climb the rocky peak of Big Ben was forced to turn back by blizzards after climbing up for several thousand feet. Most of the films were in colour, and some of these were taken by Alan Campbell, ex-VK2AC. At the conclusion of the meeting, Malcolm Perry, who is a foundation member of the Institute, moved a hearty vote of thanks to the Doctor.

Mr. Perry was present at the first meeting of the Institute, held at the Hotel Australia in March 1916, and, as an early Secretary, was instrumental in the formation of Dr. Macmillan's expedition to Macmillan Island and Melville Land. In 1917, Malcolm said those were the days when an operator really lived up to the name of "Sparks," and the crystal set reigned supreme. He also told of members of that expedition sunbathing on the ice, clad only in shorts, and the ice was known to move by biting winds. Dr. Allison answered many questions put by the members and hung up manfully under the steady flow from the audience.

It was stated that Doc Christensen may deliver a lecture on "Radio Waves in the Milky Way" at the November meeting. Professor Bailey's experiments with the ionosphere were also discussed. The meeting closed at 11 p.m. and all ended their way home after a most satisfactory evening.

WESTERN SUBURBS

Since the 20 metre band folded up recently, the local addicts seem to have given the game away, although the stalwarts still keep trying. On 144 Mc. there are strings of activity and ZACT comes on quite well. 2DP was heard in lengthy conversation with 2TH the other weekend. 2DP is putting out an exceptionally strong signal. 2LG although using low power, succeeds in putting most of it into the aerial. 2BC lays down an enormous signal on the Western Suburbs. What's the secret? OM 2BF met his checker in the same amateur who has yet to "lay" down a signal out this way. 2DF puts out some nice fm. on two metres, and has been conducting tests on 580 Mc. with 2AJA of Arncliffe. Arthur also works on two metres. 2AP1 is still having his new 200 watt 200 Mc. on the DX. 2AGX has worked his friend Italian (IY1Y) 2KS has been heard making contacts under poor conditions on recent mornings. 2ANZ has moved to new location and hopes to be on with a new beam soon. 2KZ is weighing up the pros and cons about putting up a new beam. 2NZ has made good contacts during the DX Contest. 2VY recently built a new modulator.

2QZ has been heard trying his new driven beam. Heard working VS1DT after a long lapse of time. 2LG has now got a new antenna and 200 Mc. is being tested. He is highly delighted with results—contacted 63 new countries in 25 QSOs. 2ZF has been welcomed by the Bankstown boys and will shortly be hitching his sky-hook into position. 2BX is still using the bee beam; struggling to work DX under current poor conditions. 2ADL is 2ADL, is very reluctant to take his folded dipole off the roof because of the way the DX is rolling in.

IMPORTANT

In order that the January issue may be printed before the Christmas holidays, Advertisers and Contributors are requested to forward their copy so that it reaches Melbourne not later than 1st December. We appreciate the co-operation received last year in this regard and hope that it will be repeated.

EASTERN SUBURBS

A fair amount of activity prevails in the areas and the latest to break the ice is VK5AEE. Mr. Ernest Ashby, of Bondi. He is another example of what can be done by the older generation in the way of sticklers at the hurdle will be able to make the A.O.C.P. grade, for 2AEE is no youngster. He has been an enthusiastic listener for some years and has played a prominent part in what has been known as the "old radio gang." Presenting a sense of humour he demonstrated this by providing the "H.T.L.A." gang with printed reading material of laughable nature. So far he is heard on phone on 7 Mc., and is pursuing a goal dubbed the "W.A.B." No playmates, that does NOT mean "W.A.B. All Else Will Be" but simply "W.A.B. All Bondi!" To do it is really a tall order for there is quite a team to chase. Whilst talking of the older radio gang, a thought of sympathy is expressed for all who know him in the area to Mr. Francis ("Paddy") a veteran member to the Institute on the recent loss of his wife after illness.

2ARD active since his appearance on 7 and 14 Mc. with good quality phone. Lots of wild gentry from other suburbs have been heard at 2ARD, and he goes for 2AYL and 2AEV. Dave was heard amateurly on one or other of the groups medium of 7 and 3.5 Mc. phone. We wonder how Dave finds any time to get on the air in between W.I.A. and daily toil duties. Recently he was heard on a 500 watt at 2ADT, in company with 2TC and 2EOP. 2EOP has been heard on 144 Mc. and is showing an aptitude for previously dyed-in-the-wool key pushers. Latest to break out with phone is 2EZ and Jack has been pounding a key exclusively for so long that the corners of the earth know his c.w. call intimately.

That old radio club that goes by the name of "Waverley" has been showing lots of life on 14 Mc. phone lately, with 2BM doing the operating chores in the club station; has been knocking off a few Interstates and Maorilanders. 2BV is the club call and has been heard on 144 Mc. and under a severe handicap in that it is not possible to get a radiating system in the clear. Have the block of flats next door moved boys—you were there first! A goodly measure of enthusiasm among members runs high and with the members answering to the names of Tony and Paul rapidly heading toward their own ticket and stations.

Heard at intervals on 14 Mc. phone is 2CE, but there are bigger spells of silence these days. The reason isn't far to seek for it has acquired the paucity of his life in the shape of a mighty G-made car. 2ABD doesn't seem to be the consistent

14 Mc. phone DX chaser of yore, and is heard occasionally on 7 Mc. making use of a No. 11 transceiver. Colin was in the news lately when he came near to losing his ocean speedster "Kyeema." Colin and 14 Mc. phone have now blossomed out with a comprehensive double ended i.f. receiver. Unless we miss our guess, 2AZH had a lot to do with the evolution of the receiver, which uses 110 Mc. second channel. 2HP has taken the (gasoline) road and seems to be dashing hither and thither in his buddy. 2AZH, is still making out reasonably well on 14 Mc. phone with a vertical antenna.

2HJ puts in an appearance now and then on 14 Mc. phone; Otto doesn't seem to be interested in DX but seems to be in a car with our own Interstate. 2HJ's ribbon leaded dipole has broken, has changed for an open wire folded dipole and feedline, and it stays in one piece. 2QZ has been showing up lately on 7 Mc. phone after a few months' absence. Nothing that you have got that presents 2ADL's idea of a good antenna on the carrier OM, and that the transmission now sounds like AM as intended. 2AX doesn't miss his Sunday morning 7 Mc. phone chat with old cronies such as the "Why Fox" and "Old Bill," but what we want to know is where is that other old dandy Andy! Why? Why, the old "Lark" of course! 2AX can be heard frequently knocking over a few Wa's on the key on 7 Mc.

2FJ is still dreaming of what he is going to do with a plot of land somewhere up the coast away from us QSL makers. Powerline has been a sore point with John and George, who have said "Nay." Nevertheless, we hear 2FJ in with the WS at times, so the old "Rolly" (W8NLP) beam can't be too bad. In the same area, 2YF is getting more contacts DX-wise since he installed a two element rotary, and that is no mean feat when living perform in a block of flats; recently burnt out his modulation transformer.

2AJG working c.w. DX on 7 and 14 Mc.; we haven't heard that cathode modulated phone for some time. Listened to the other day to 2QG on 7 Mc. and heard the 200 watt 200 Mc. 2ADL and 2ATZ driver. Antenna half way 200 Mc. and 2ADL above the ground; Jack should get good results with the new gear. 2WT has been using his home-built Transceiver as fixed portable using 3 watts on 80 with 200 Mc. as a multiplier. 2ADL has strung up a long wire antenna 300' long running from hill to hill; results so far are disappointing. 2ARZ Coffs Harbour just completed new double-conversion RX. Jim works all bands. 2AJB not active, too busy with the new harmonic. 2AJB going on holidays, and will be back in time for the Xmas and visit Ham shacks on his way to Sydney. 2JU hopes to meet the North Coast gang at Xmas during his holidays. Hart intends to travel the Highlands road to the border and then down the coast road to Ulladulla. 2AP2 staying around with Geoff. 2AJT heard portable at Coonamble. 2JU just completed his new home and has a new transmitter under construction; it won't be long before Geoff is on the air again. 2TB has had a bad spot of b.e.i. with his new 200 Mc. antenna and has had to work hard. Peter has cleaned up his 200 Mc. antenna. Both parties are happy now! 2NY, 2G1, 2TB, 2SR, 2AAP and 2XO met at Grafton and had a "pew wow" and inspected the Grafton match factory. No news from Richmond River gang. 2PA and 2YF have been working well, mostly by holding visiting the Dubbo boys 2NS and 2FJ of the few in Sydney. Peter used a Command Tx and Rx as a portable.

2ARY busy with recordings and installing a two element beam on 7. 2XO not very active due to sickness. 2ASF the most active. Hart and Peter have contacted any morning around 7 a.m., coached a few prospective Amateurs in Kempsley in his spare time. 2DK not active due to shearing; Chas, expects to go QRO from the wool clip. 2HIC still active on 80 using a new mike with excellent results.

HUNTER BRANCH

The new Branch Secretary, Varley Flitten, 2SF, seems to be settling down to the job very nicely. W.I.A. will be active and Branch activities, etc., will not be on the air. The recently formed committee to arrange lectures, etc., have worked out a scheme to cope with the next 12 months, and this will relieve the Secretary and President of much work. 2CS has been experimenting with low frequency 1F's, and has some interesting findings on same. 2AFS had a great time recently during an A.I.F.

Force Display smoking American cigarettes—good old Uncle Sam! The latest craze at 2AFS is photography and doing a fine job at it too. By looks of those very fine chassis at 2FTF, Eric must mean business with the p.d.s. 2AFS is now on 2 with 2AFS, and Eric has worked 2AFS in town; has a 6 max. converter going, too. 2PQ has been operating on 10, 20 and 40 phone and a little c.w. Tom worked a few during the Contest. 2TE is building converters, has a very big job for 2AFS, and is having a great holiday and vacation after the contest is over. 2AFS is in the market for a band-switched Rx. The post Secretary, 2LV, still very up, but has new exciter under way. No news of Shorty, 2X3, guess the YLs are winning.

his house, Bill still acts as 2PT and his wife, who settled down at New Lambeth, is still 2ZL, too. **XY** is a very happy man—has working DX too. **2XY** is another that had a good holiday, in the new shack and is back with the 2ZL gang. **2AA1** has this month 2ZL moving from the dirt and mud to Wallend. Why the boys pick the West I don't know. Is the QRM increasing? Dave's main problem is the removing of the telegraph pole from the old QTH to the new one—any ideas? **2AA1** is still listening to Birmingham Gardens, **2AA1** only listening as yet.

is very QLIB, but should make the air soon. 2XG has the chassis of his hf. RX copper plated, should go in 100' from me on account. It is very pleasing to have a good friend in the area. I hope he will be around for a long time. 2AO8 has been operating on 40, hope you can get along to the meetings on the 2nd Friday of each month old and new 20' tall starting in April. 2AO8 has been very nice job of a s.a. recently; only heard on 40. 2ZG went to Kempsey to pay his last respects to Gerry 2ZB, and represented the Hunter Branch on the service committee. Gerry 2ZB will be missed on 40. Police and Crime, South Scott has his Ham Call, 2AO8, and is active on 40 c.w. with an 807. How about attending our meetings with a 20' tall. We will have the only one in the Maitland, and the second quietest spot for 2DG in the Contest. The phone bug has caught on, Keith must have got tired of the smoke signals. 2XQ arranged another emergency net practice. John 2ZJ has a new 20' tall antenna, and is looking to the future and should create much more interest. 2AO8 is on 6 again, with a solid signal, has 807s on 40 and 20. Despite poor conditions, 2ZJ has been getting out well on 10.

COALFIELDS AND LAKES

During the past month the Coalfield Weathermen were favored with a visit from three of the Snowy Division members of the W.L.A. from the northern $2YQ$, $2ADT$ and $2EZF$. All seemed to have an enjoyable weekend and we on our part were happy to have them. Apparently $2RU$ has been too busy shifting the hill between himself and $2EZF$ to allow 50 MHz working to get on the air. $2EZF$ is in contact on 144 MHz and has a lunch hour hook-up with $2YQ$, $2ADT$, etc. $2YQ$ has been heard on 10 again, still talking about antenna; better get something ready for that DX on 10. Nothing from $2RFK$ but $2EZF$ has some new metes and $2EZF$ should be the big, new DX for us this late in the year. $2ADT$ on 6 was down to $2ADT$ and $2EZF$ at Toronto; Ken should have some more time with the shearing over. Nothing new from $2VU$, mainly on 6 working the locals.

2Y often heard on 80 working ex-Mailand Ham, 2ADX, now at Grenfell. 2ALR still too busy for Ham Radio, 2PZ hasn't made it either. SADT as usual working all bands, 6 being the main stamping ground, while he uses 40 as a hide out around lunch time. Been playing around with the TR1196 on 80. Had a few days in the big smoke with an athletic team. 2YL reasonably quiet, managed to

work a few in VK-ZL c.w. week-ends. Conditions seemed good for Europeans. 2AST new Ham at Long Jetty, is on the P.O. carrier wave staff and hopes to be on 144 and 50 soon. 2GA, 2KR, 2RU are busy on field day organisation for the Woy Woy Day. 2AMU busy with high fidelity, talkin' of micro grooves, alter lancing speakers, etc. Conditions on 144 seem to be on the improve at Gosford. 2ABC 99 plus consistently.

WESTERN ZONE

The saddest event of the past month was the sudden passing of our cheery comrade, Gerry 228. Into the long list of Silent Keys, his name will go, but his memory will remain. Vale Gerry—Good DX Q.C.

Welcome to a newcomer to the Western Zone. 4WY is soon to take up activity in Orange. Expect to hear quite a lot too from 2AGN from the same area. 5A7D is a new call from Understrand Bill who originally a Comancher, but now located on North Coast. ZUAPP appears to be V.L.S. (most of the month)—or cracking jokes!! When Rod says, "Have you heard about this Dumbass?" he means it. 2CP is from Katoomba, NSW. When we listen out for that 6 m/sx Bill's Broken Hillite 2ZYX putting out the usual good sig. When conditions were bad, John heard all and was heard by all. Not much news from Dubbo, NSW. No particular activity when we last heard QRM from neighbouring (from a VK) 3EXP and 2EL quite very whilst the only noise we heard from Freddie was a yell from one of his patients.

SOUTH COAST AND SOUTHERN

There seems to be some activity on the Southern Ontario 20 and 21V bands, particularly 20. There has a very effective signal and it is running a re-vamped 101 and controlled carrier system. You hear a weak carrier, but when the modulation is on the S meter it is quite hard. 272 and 242 were heard at 80 and it appears there will be a break at 80 and 86 at both times. Jack recently arrived at Grenfell and is putting out an f.b. signal. 2TC is very QRL, but manages to get on for a yarn now and again. 2TC has been very active on 20 and 21V, but spoilt the location for the erection of this antenna. Six mx will receive plenty of attention this summer. 2APP of Mono Eagle active on 40, heard talkers of rotary switches and such things. 2WP was

heard romancing about his new rig. 2JQ has been transferred from Crookwell, and will be heard operating from Junee in the near future. Expect any day to see a semi-trailer loaded with Monty's possessions passing through Junee at 2100 on the 15th. Monty is leaving his car for 14; a few weeks later, but everything else OK now. Has the two element beam plus an 1A Rx, a la Hammeunder style. 2PI very busy with b.c. station work. 2AJP has taken unto himself a new panel van and is fitting it out for mobile work, and is looking for a Commando Rx BC441. 2OTV is building a 100w narrow fm. adapter. Jack action is 40 cwt. 2ALAS has been trying out a 100w fm. r.t. stage in his AHS. Not much activity due to pressure of work. Little activity at 2D0, have sold my old Rx and have new job covering 0.54 to 31 Mc., stali filter, 8 meter, noise limited, five position selectivity, reg. voltage to 100v, 100w fm. 2ALAS has been trying out a 100w fm. adapter in all. 2HHS has been trying out a 100w fm. adapter in all. Associate members in this Zone in providing news and notes each month; send them along to the listed notes each month; send them along to the

VICTORIA

The monthly general meeting for October was held to a large gathering on Wednesday, 4th October, at the Melbourne Technical College, Bowen Street. Melbourne. The meeting got under way at 8.00 p.m. Our usual President, Mr. Sammons (3GMS) was in fine form and declared that the meeting opened. The Secretary, Dick Dyer, read the minutes of the last meeting. Apologies were received from 3XD, 3AN, 3OP, and Messrs. Lemming and Wheelahan. The following visitors were given a hearty welcome to the meeting, viz.: 2ASK, SAHO, VQWH, and Bill Jameson (who signed an application form for membership).

Without further delay, the President called on Mr. George (JAPF) to tell the meeting something about Simsput and their relation to radio signals. Bourd had that most prized attribute among lecturers, the ability to express in simple language the complex and difficult with clarity and in a manner as to make it all seem so simple. He used the help of film strips to illustrate his talk and started off by showing the analogy of radio signals striking the various lines in the outer ring of a circle. He then said, on the basis of the observation that the Simsput were traced back for the past 20 years and these charts showed how consistent the Simsput appear approximately every 11 years.

He then passed on to explain how to read the Prediction Charts as appear in "A.R." Although they may look a little hard to read, it is a simple matter. According to charts and graphs, the maximum Sunspot activity appeared in 1959. Ron left us with the words, "We will hope the DX will be as good in 1959." However it will not be as bad as that, because there will be openings from time to time with excellent DX workings. The lecture took 90 minutes to deliver and was listened to with very great interest as was shown by the numerous questions fired at Ron, who answered them very fully and to the satisfaction of the questioners.

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from: Ham Radio, Collins, Willis, Magrath, Atkins (W.A.)

Here that a couple of local chaps are going onto c.w. so as to defeat the zone correspondent. They claim he can't read it, "Cads!" I'm doing my best but what with my inability to read it and their insistence on sending it, I can't do much. I reported properly. 3KR on weekly sked with old zone member, 3DW (Dong), might have heard a lot if QRM hadn't blotted you both out. XYL claims I'm only an eaves-dropper with a fancy title anyway. SAGN has a second one on Saturday mornings to do his bashing, send out his QSL cards, keep the log in order, tidy the bench, sweep the shack, etc., "Guess Who?"

3YE assures me that he will soon be heard on 40-80-10-160 m. and 20-40-80 m. 3YE and 3RE are in his v.f.o. that he thinks may stay put now. However a 40-80 metre antenna is a little longer than a 6 metre one. 3UH has gadgets galore and saw the results of the automatic keyer he had making waves handily. Anybody interested should contact Alan and he can explain how it works because I can't. A lot of portable gear laying around also.

3VY, Howard, is again in hospital and by the time this is written we hope he is well again. Best wishes from all the boys Howard. 3AGT has a c.r.o. fitted to his receiver to take modulation checks on incoming signals. Don't forget to allow for the non-linearity of the i.f. stage. You will be greatly over-modulating if you take a c.r.o. 3AE was trying to copy 3FD by watching a dot bounce on the screen. What about using your freq. meter for a b.f.o. Let and save a nervous break down? 3FD still waiting for a home light plant, 3VY is still waiting for his 3000. 3PBM has been ballyhooed by his voice. 3FO joined in the hook-up to obtain news of the zone's activities. Heard 3KR had visited Ballarat and complained about the cold something about his writing hand being frozen off. 3VY has a triple triode. Ken has a shortwave via the circuit man box (get him his 40 metre aerial up on Sunday but not in time for the hook-up. Also absent from the hook-up was 3AGC, flying 3AGB, 3AGD, 3AGF, 3AGH, 3AGI, 3AGL, 3AGM and 3AGK. Anyways these boys had turned up, it would have been a marathon; golly can you blokes bush?

SOUTH WESTERN ZONE

3MC of Cobarine, still has his 80 m. skeds with SHG on Sundays and hopes to be really active

soon. 3II is contemplating a super dooper new rig. 3WT had a visit from Brian Fair, s.w.l., who was one of the intrepid four who camped at Lake Burrumbat last Ballarat Convention. Brian is now in the zone and has a 3000. 3II has 3JA fitting out a very nice sig; why don't we hear more of you on the lower frequency bands Jack? 3BU is expecting some tape recording equipment. England soon hopes to have a home tape recorder and the wire job before very long. 3UT active on lower frequency bands (20 and 10 have been flat); using a Type 3 Mk. II with series cathode modulation. 3HP has put a rhomb on the States, 12 waves per side and is getting consistent results. 3H has a 40-80-10-160 m. Commercial rig with 15 w. input. 3ARG has also been heard on 80 after local station closes down. 3AMH has recently got himself a new car and of course has not had time to go on the air much.

3HIV changes his 40-80 m. to 20-40-80 m. and put up a six element one, but it wasn't much good.

3VY is still having an attack of eye trouble. Bad show Bert, I do hope it gets better very smartly. 3VY has been lamenting the loss of his only 20 metre ground wire. The poor fellow must have received quite a shock when it turned up in the 144 Mc. is still booming in the S.W. Zone and 3ZL and 3GM are still bowling them over with their respective four wave and five wave, five beam. 3AGD has now got a 522 outfit and hopes to have it going satisfactorily soon.

3AOL was rehashing Rx, now putting out a better signal so when he first came on he was the final; operates on 40-80-10-160 m. 307 in the final; operates on both phone and c.w. Has worked VRTAS and quite a few ZLs and Ws. 3ALG having a bit of trouble with the rig, has worked quite a few Ws on 40-80-10-160 m. 3CIC has a portable, call 3ABU; puts out an extra good signal. 3AJT complains of poor conditions on 20, but still manages to get quite a bit of DX. 3ALG was at his shack recently and, and John, the new boy, gave him 5 and 9 plus. 3AHE hopes to have his new mast in the air shortly and now has everything wired up to turn the beam. 3IC works quite a few VRTAS on 40. 3WT head in the S.W. Zone net, not on very much. NIH to report from 3VF, 3BW, 3AKER, 3CM or 3AEK. 3AGN has built up a transceiver

for 2 m. although have not heard of his activities on that band yet.

GEELONG AMATEUR RADIO CLUB

The Geelong Amateur Radio Club held an exhibition night recently. This was the first of its kind to be held in Geelong. Many pieces of modern equipment were displayed, including receivers and transmitters for various other bands. During the evening the club's transmitter was operating on 40, 80 and 2 metres. At a later meeting the lecturer was 3AJC who gave a very fine talk on transformer design and made use of the blackboard throughout his lecture. At the next meeting members were favored with a lecture by a guest. He was Mr. Cruikshank, B.E., A.M.I.E., whose subject was on generators including, the L.I.F. generator. The lecture was very interesting and members were greatly interested. At Mr. Cruikshank's first time. The President of the Club, 3AJF, thanked the lecturer for his talk. A visitor to the club was s.w.l. Brian Stears.

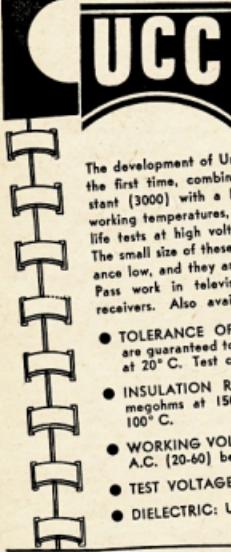
PAR NORTH WESTERN ZONE

The gang from this zone are still rather quiet, so far as activity on the air is concerned. 3TI is on most week-ends and occasionally through the week. The new receiver is working very well and Cliff, the 3VY, has kept Chas posted with the doings on the bands. Sunday morning hook-ups are fairly well attended; 3PC, 3AFC, 3TI, 2AHM and 3GZ usually making the grade. 3MP appeared on 7 Mc. on c.w. and 3VY, 3TI and 3PC from here for a while again. 3SN worked portable from c.w. for a while using a Type A on phone and c.w.

3AFO spent his holidays in Sydney. Bring any good gear back? 3SN, 3TI and Cliff gathered at 3GZ's shack on a couple of Friday nights. Chas and Max spent most of the night trying to fix a broken 3VY. 3VY had a 310 worked up and wrecked a few before they gave it away as a bad job. Graeme and Cliff were left to work the rig and managed to rope in a couple of Ws on 7 Mc. 3AUD reports that his shack is nearing completion, also his 5 inch speaker and 1000 p.f. condenser. Now it won't be long before we have 144 Mc. gear on the air. Jim Power, one of our Associate members, sits for his ticket in October. Best of luck, Jim. Max White, an Associate from Ouyen, was in Milawa recently and pounds our ears about Ham Radio. Max hopes to sit for his ticket soon; best of luck

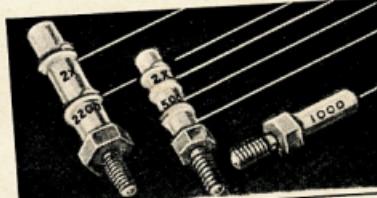
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2CTH 315/5	2 x 1000 pF	0.18"	0.67"	6 BA	—
3CTH 315/5	2 x 1500 pF	0.18"	0.67"	6 BA	—
2CTH 422/5	2 x 2200 pF	0.24"	0.94"	4 BA	—
2CTH 315/5	3 x 500 pF	0.18"	0.67"	6 BA	—
3CTH 315/5	3 x 1000 pF	0.18"	0.67"	6 BA	—

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to you also Max, hope to hear you soon. No word has been heard from 3NG at Red Cliffs; guess you are waiting for the a.c. power. 2AHM from Willow Point State has been to me three or four times in the past six weeks. Jeff is working on his new receiver, a turreted tuned job with double conversion, etc. That's about all the news and doings from this zone for the month.

QUEENSLAND

Well commencing with this issue of the mag, you have the misfortune to have acquired my services as Sub-Editor, Queensland Division, which I accept with a word of warning to all you fellows who reckon I splatter or who jam me when I'm working that rare DX—the DX you mightier than the sword I mention. I expect you will be pleased to see my report on c.w. I would here like to take the opportunity of thanking Frank, VK4FSN, for the excellent job he has done over the past two years as Sub-Editor. He has really set a high standard for me to follow; I will do the job that, being entirely inexperienced, I am sure I could not do better than I can cope with. It is hoped that the various promises of reports from my spires will help to offset the latter. I know I am speaking for every reader of the Queensland notes when I say we appreciate all you have done—thank you that we are sorry you are unable to carry on with the job for the time being anyhow. Let me know when you are free again and you will be welcome to the job O.B.

At the monthly meeting of the Institute held in the L.R.E. Rooms on 15th September, there was quite a good crowd of QSL'ers, notices 4MD, there though—it was decided that no members could receive any care cards forwarded to them care of the Inwards QSL Manager, only after payment of a fee of 5/- per year had been made to cover cost of postage and handling of same. Personally, I think this is not a member through his own choice has a right to expect and receive from our organisation free of charge and I think the above is only encouraging the growth of non-members. I am glad to see that they apparently will not obtain service from our outward cards. Remember these are cards are mine and not necessarily those of the meeting.

Also on display at the meeting were the transmitter (7 Mc.) and receiver which are going to be presented to Arthur Tonge who, as many of you will know, is blind. The gear has been beautifully made and I must say that it is a credit to the v.t.o. to be tuned out of the band by being locked to within 5 Kcs. of the band edges. The receiver dial has an embossed calibrated dial (all scales also sealed).

A very informative lecture was given by Mr. Doug Sanderson, of the P.M.G. Department, on "Multi-Channel Telephone (Radio) Systems," in which we got an insight into what makes such things tick as well as the various problems that confront those who undertake the selection of suitable sites. After the lecture P.M.G. were more than a bit surprised coming from a P.M.G. man, but I am on the telegraph side, so I am still a humble Ham. After the lecture I suggested to 4FP and 4JO that they might consider a multi-channel system whereby two channels (in their case) may be employed on 20 metres. 4JO would then be able to take advantage of 4FP's transmitter, but I think they would not be interested, mainly because they don't think they would be able to determine who should pay electric light bills. I hate to think what is going to happen when 4JO decides to erect a three element rotator. They will be getting different working of the existing stations according to which way the opposition is he pointed. That would turn out nice and sandy for us poor dipole mortals—or is it mortals? From what I could gather the r.f. power output on one of the commonly used P.M.G. systems is only 300 milliwatts. The EF50 (EF95) is prominent in the one hundred and eight valves used.

It would be appreciated if anyone, who hears of any news of Amateurs in Queensland, would write me a letter with such care. I'm sure I don't. The address is 122, 10th Street, Clermont, Cooke (VK4CC), Kurun Street, Chelmsford, Brisbane.

Have been reading some mail on 80 metres last few nights and have been surprised to hear the ZLs and VKs of all States romping in. 4HA seems to have the band to himself, in Brisbane area any time. He was working VK6 and VK7 and told me that he could hear a W7 calling CQ at intervals. I couldn't hear a sign of the W myself, so I've got either bad ears or bad gear or, what is most likely, his good equipment, nevertheless it was an easy operator to me. I think the W7 could be heard on the band (about 11.30 p.m.). The VK6 came from plate modulation to carrier-controlled modulation (screen grid), and to my way of thinking the latter was far easier to listen to. I tried the system myself, mainly to the avoidance of my neighbouring Ham, although the 500 W he was supposed to be covering was a bit stretched I think.

VALE VK4RC

With the passing of Bob Campbell, VK4RC, late in September, Amateur Radio in Australia and in particular the Queensland Division, loses one of its outstanding and well liked personalities.

Obtaining his ticket in 1933, Bob had made himself a high standard of operating and his passing removes from the list one of the few remaining 100 per cent. "brass pounders."

As a DX man, his efforts were noteworthy, holding post-war W.A.C., W.B.E., B.E.R.T.A., DX C.C. (Aust. and U.S.A.) and was second VK4 member of the First Class Operators' Club.

A staunch W.I.A. man, he was Outward QSL Officer until his illness forced him to relinquish the position. He was also Treasurer of the Queensland Division for some time after the war.

VK4EL, his helpful friend, in writing says: "In my lifelong experience in Ham Radio or for that matter in any walk of life, I have never met a more admirable character, such an even tempered and gentle person, and a sincere Ham everywhere will miss his cheery and excellent fist. He was truly 'A Gentleman and a Ham' and fulfilled to the letter the following clauses of the 'Amateur Code':—(i) The Amateur is gentlemanly; (iv) The Amateur is friendly; (v) The Amateur is balanced."

In the interests of harmony, I have reverted to plate modulation with negative peak clipping and so far I have not bothered to tell one of the few ex-complainants that he covers practically the same amount on my dial when it is after the DX; he is still on local content though. I've so far taken the chance that perhaps my receiver is at fault. As one famous leader once said, "He who is without sin, let him cast the first stone."

4DN has been in the news a lot lately matrimonially, but it is nice to hear Bill back on the air again. He has been having strife trying to get out to a strength, using transistors, 4W4 has been sporting around, can notice a few transistors or by accident, there is a parcel rack in the front which is an ideal posy for mobile gear. I am tipping that Jack soon has one of the few mobile gear in Brisbane—so I am sure ways and means of making a good antenna system is a must as well. Believe 4WD is threatening to build a new receiver, and speaking of Bill, I don't think it was noted in these pages that he is now living in Brisbane; he has brought his family down from Townsville and has settled to a new home. It is nice to see you young men meeting Bill and hope to see you there for many years to come. No doubt you all know Bill was one of the early pioneers in post-war phase modulation a la battery, carbon mike, and transformer. Simple enough and it really worked, although he was not using a bias stage. Bill S. 80% he can let you hear p.m. now when you want to. Ask Jim (PTW) what he knows about car spraying.

You hear about 4AH, he had some Fluxite which for some reason or other was not in a tin, so put it in an empty Marmite tin. You can imagine what he said when he found after the fourth sandwich that he had not been eating Marmite—Mar—don't stow your gear in the kitchen. To 4UX we extend hearty congratulations on the arrival of a son. By the way my own comes around I hear there are no boys left. Anyhow Claude, please extend the congratulations to your good wife; you don't deserve all the publicity.

Now this is important and it is hoped that those of you who read this will pass it on to those who have already been boared. The QSL officers' names and addresses are as follows:—

● Outward QSL—VK4RL, 62 Manilla Street, East Brisbane.

● Inward QSLs—VK4JF, Vanda Street, Chelmsford.

I was lucky to be 4FB's first VK 20 metre contact. Peter has only been on the air for the past week, at date of QSO, and he seems very enthusiastic about 20 metres compared to 40 metres. He has a 40 watt triplex controlled at the moment and modulated with the usual—*the usual* (4MD). After listening to Peter and Mick (4MD) burning the midnight oil in a crossroads QSO, I think Peter is going to be a contender for the ear-bashers belt if that is ever handed out. Never mind about that though Peter, you have a few more to go in yourself, and I am sure you will be a good operator. 4FB is quite a picture to me. Fred in particular recently when the XYL allowed me off the chain for a half hour and gave me \$1.00 to buy him a milk shake. I got quite a surprise to see how young old Fred looks—and handsome, too. He reminds me of my childhood radio hero, Uncle George of 2GM.

Before pulling the big switch I wish to remind zone managers to let me have notes by the third week of the month if possible. I hope I receive the co-operation you gave Frank in this thankless task. I am sure that the QSLs from the like of Clive, VK4CL, and others of 4NC's harmonics (that is no wise old Uncle Charlie), for which I publicly thank her and I only hope she can find time to keep up the good work.

Heard a VK4 depicting the fact that commercial stations were appearing on the 20 metre band and remarked that he was always one on top of 4MD and 4V3. 4FP was also in the list of the ones looks like that new beam is really working Johns. Sorry to hear 4GE is leaving the Amateur ranks and disposing of all his rig. Well, maybe not all. You never know when the bug will bite again. This rumoured new beam, I believe, will be re-run to dodge 4V3's beam; so will poor Vincie 4V4's rectifier tubes are the sole property of his XYL Cynthia and can be promptly removed without notice. You'll have to rectify this Noel, 4MH in Brisbane. I am sure he will be compelled to visit quite a number of the local ways before getting to his own QTH. Heard a huddling Ham sign off recently with: "73 and plenty of XYL."

DARLING DOWNS ZONE (4CO)

Conditions are picking up a bit on the bands. Twenty metres recently has turned on some good European and African DX around 11.30 p.m. onwards. Plenty stuff like CN8, FA, CR7, F, DL, YI, SM, OH, EA, G, ON, OZ there for the taking. Heard 4V3 in. VK4 also claimed his share. Dame rumour has it that he is still in the air. Bill at present having a spate of farewells prior to going to Orange where he will be on with a VK4 call. Fare-the-well, young Will. 4G, 4P putting out nice phantoms 40 and likewise 4JC, 4G putting out the last lot. 4C and likewise 4JC, 4G living the dream life. 4C.

Probably the most interesting news in this zone has been the upsurge of 50 Mc. activity. 4CL and 4XN, Queensland's two 6 metre men, have a pretty reliable two-way circuit operating between Clinton and Dalby, about 50 miles over the flat black soil. Interestingly, 4CL has a very reliable circuit to 4KX at Mungindi, and in turn 4KX has a work 4XN more or less regularly. Now, due to high-pressure stuff from 4XN and the air testing of a converter, 4CG has entered the select ranks. 4CG is having all three stations during the past month with unbroken regularity. Now, 6 metre TX is almost ready. 4G also reports hearing 4CG on 5.16 Mc. on Sunday 25th September. Norm, 4YI, is showing more than a passing interest in all this going on and will probably succumb to the same disease, especially if 4XN and 4CU put that pressure on.

Members of this zone were profoundly shocked at the sudden death of our good friend, Bob, 4HC. Only a week previously we had a happy QSO with him and he was feeling fine. And so the wheels of fate grind relentlessly on. Vale Bob.

SOUTH AUSTRALIA

The monthly general meeting of the VK5 Division, for September, was held at the School of Mines Building and took the form of a film evening, which was heartily enjoyed by the large number of members present. Naturally this meeting was not a social gathering, but a general meeting, and therefore no official business was done. After the meeting, the members present, including the officers, signed the book, nobody afeared any grievances left high and dry, and with absolutely nothing to write about, no matter how hard I try, I cannot even "find" this open page program either.

I was not at the meeting, owing to pressure of business (and not monkey business either, though very much), but quite a number of chaps that I spoke to next morning, said that the evening was a success. I am sure that would like more of them. My immediate superior on the VK5 Committee was heard to remark that the reason that I was not at the meeting was because 5KX was not available with his souper dooper vehicle and that I was too poor to patronise the electric tram. I tried to explain, with some difficulty, that I indeed admit that Mr. Wilson was not available because a truck had been seen flying around Henley Beach during the day and therefore no risks could be taken. I was shrewd in that John, because he not only shuns the wind, but also turns up all the chimneys as well. Anyway, to cut a long story short, John is the father of a bouncy bouncing boy who answers to the name of Michael John, but I shudder to think just what my XYL would have said to me if I had not thought of that chimney. I can hear her now, with that voice of shoddy which she keeps for special occasions, saying, "Petals, don't you know you're a bit of a fool?" Best wishes Mr. and Mrs. 5KX, and not only will I be available to wash and polish that roomy and comdy vehicle, but I will also be only too pleased to wheel Michael John along the seafront at any time. Try that on your grand piano Barber!

There appears to be a hoo-doo on the VK5 Divisional Secretariate ship at the moment, as first of all 5XU, the present Secretary, had to go off to hospital, and when 5MD commented as to his recovery, he was hardly in office a couple of weeks

NOTICE TO HAMS!!

For that Power Supply feeding the low to medium powered Modulator or Transmitter the A. & R. Type PT1400-19 is the answer. Primary: 200, 220, 230, 240; Secondary: 565, 425, c.t., 425, 565, at 250 Ma., two 6.3v. 3 Amp., one 5v. 3 Amp., two 2.5v. 2.5 Amp. Price (including tax), £4/18/4.

In response to numerous requests for a more universal high tension transformer, we have redesigned our type PT1371-8. It is our belief that the new range of taps will meet the requirements of both "Hams" and "Sound Men" alike. The new PT1371-8 now features the following:—

Primary: 200, 220, 230, 240 volts; Secondary: 500, 600, 750, 850, 1,000 volts per side of C.T. at 300 Ma. The price of this conservatively rated item is unchanged by the modification, and is obtainable at the old price of £6/8/1 including tax.

A further A. & R. type is a must with many Hams—namely our AT1202-22 mains adjusting transformer. This item is tapped from 180 to 250v. in 10v. steps, and will continually handle a 500 V.A. load—ample for the total drain for any rig. The price of the AT1202-22 is £3/17/4 including tax. Also available are mains adjusting transformers rated at 100, 250, and 1,000 V.A.

All A. & R. Products are obtainable from:—

Wm. Willis & Co., 428 Bourke St., Melb. (MU 2426); J. H. Magrath Pty. Ltd., 208 Lt. Lonsdale St., Melb. (Central 3688)
Homecrafts Pty. Ltd., 290 Lonsdale St., Melb. (Central 4311).

A. & R. Electronic Equipment Co. Pty. Ltd.

378 ST. KILDA ROAD, MELBOURNE, S.C.1

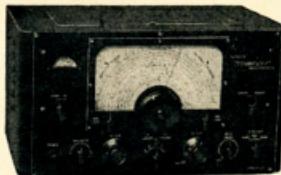
Phones: MX 1159, MX 1150

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Interstate Representatives: West. Aust.—Messrs. Atkins (W.A.) Ltd., 894 Hay St., Perth. Queensland—Messrs. A. E. Harrold, 123-5 Charlotte St., Brisbane. In other States direct your inquiries to firms handling Bright Star Crystals.



Valves, new, boxed, RCA 834s, £1/8/- each.

6C4s, 12/- each.

Limited number of the following Taylor Tubes: TZ20s, £2/10/- each; TB35s, £6/10/- each.

Transmitters altered for Bush Fire and Fishing Boat Work.

CRYSTALS, as illustrated, 40 or 80 mx., AT or BT cut. Accuracy 0.02% of your specified frequency, £2/12/6 each.



20 metre Zero Drift, £5 each.

Large, unmounted, 40 or 80 metre, £2 each.

Special and Commercial Crystals—Prices on application. Crystals re-ground, £1 each.

BRIGHT STAR CRYSTALS may be obtained from the following Interstate firms: Messrs. A. E. Harrold, 123 Charlotte St., Brisbane; A. G. Healing Ltd., 151 Pirie St., Adelaide; Atkins (W.A.) Ltd., 894 Hay St., Perth; Lawrence & Hanson Electrical Pty. Ltd., 120 Collins St., Hobart; Collins Radio, 409 Lonsdale St., Melbourne; Prices Radio, 5-6 Angel Place, Sydney.

A.W.A. Split Stator Transmitting Condensers, high voltage, £2/15/- each.

Screw-type Neutralising Condensers (National type), suits all triode tubes, Polystyrene insulation, 19/6 ea.

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BRIGHT STAR RADIO 1839 LOWER MALVERN ROAD, GLEN IRIS, VIC. Phone: UL 5510.

Believe 7BW is at present active on 576 Mc. Special for v.h.f. mode above 576 Mc. although other than 7BW in the north, Bill has this band to himself. Conditions on 40 and 20 metres during the month has not been bright, it is rumoured a few 10 metre lads are watching this band; indications at present show conditions are not so good as in previous months. Incidentally, the mention of 80 brings to mind that Len is the only Northern Ham who is active on all Amateur allocations from 80 metres to 576 Mc., which is no doubt a fine achievement.

Congratulations Ted on the addition of a junior operator to the family. Incidentally 7GB is one of those unfortunate people whose profession does not permit his attendance at W.L.A. meetings. Activity has been so far on 40, and is often heard working DX with f.b. signal. The rig consists of a "Clapp" with a 807 in the final running approximately 15 watts, nevertheless a good report is usually received.

Helped to meet one of our Associate members the other day who is destined of joining senior ranks in the near future. His name is John, and his call name of "Sandy" Powell. At his place of employment, "Sandy" is regarded as a conscientious worker an unbiased teetotaler; his entry into Ham Radio will be welcomed at least by one, that being his dad, 7AC. Sandy has long banished to Siberia, sorry Laemmert's Asbury, hope to work you sometime in the future "Sandy".

Activity amongst the southern members have been limited; those heard during the month were 7BH, 7OM, 7SD, 7RX, 7KX, 7KA, 7LD and 7SK. A recent adjunct to the W.L.A. which has been well received by most members is the erection of new facilities still given by 7JB after the W.L.A. news on a Sunday. Plans are already in hand at 7SR for participation in the next field day contest which usually held in February. Believe quite a lot of power is now available, so it is hoped a good set will result.

Noticed 7GT and 7LL purchasing radio gear at one of the local radio stores. Seems as though "Doc" intends "operating" again after a few months' absence. Glad to hear 7M is feeling better again in Melbourne. Heard from a well known time you mentioned giving Ham Radio away, but things must be OK again after seeing that large parcel of radio gear you recently purchased. 7RM back in town again after his monthly visit to the north, he brought a crystal controlled converter is next on the list.

NORTHERN ZONE

Our lecturer at the September meeting was a visitor to the zone in the person of Mr. Len Durkin, 7JP, and being in the employ of our worthy P.M.G., his subject covered telephone exchanges generally and more particularly the relay used therein. Two cars were present during the meeting and one noted the boy of the moment objected to the search on the way out. These camping little "doovers" seem to do just about everything except put Ham Radio on a sound financial footing, and audible rings were heard when trying to make the operations were through a modern exchange, particularly the automatic type. We are indeed indebted to Mr. Durkin for his most interesting talk and I, for one, am not nearly so reluctant now to insert the "two pennies separately please."

On the way home, both 7LZ and myself reverently doffed our hats to each and every public telephone we passed. I do hope somebody sends a copy of this to the P.M.G., he may decide that it's time to scrap our manual and give us telephones with those dial gauges on front.

On the way up to the subject of lectures, a mention could be very well made of the member who is responsible for the line-up of extremely interesting talks we are enjoying. 7BQ is our officer I/O lectures. I'm not sure of his technique, but in the bobbying capital of Australia, the Taxation Department is out just plain threat, but Len certainly seems to get around among the right people to add the pleasant side to our meetings. Good work Len, and keep them rolling.

The bands have not yet recovered from the thrashing they took during August, maybe it's just peevish, but on 10, 20 and 40 metres we did certainly think the month was just run. Rather than October. Even the annual DX Contest failed to provoke even a vestige of the frenzied activity of the past few years. Listening around, I noted the absence of a few of the regular contact calls. Seems that the novelty of running up a large amount of stereotyped QSOs has worn somewhat thin. The main use for such occasions now seems to be the snaring of the uninitiated. I am sure that the DXers will be a very good argument in favour of one good world-wide contest each year, instead of such a large number of smaller affairs.

The months of the month seem to vary from debugging converters to buying meter and antenna for 7LZ and the like. 7JB's converter for 10 and 6, a 6AK5, 6J5 affair, is now yielding to persistent attacks on its irregularities and is beginning to perform very well, the main objection to complete satisfaction is of course still the antenna. DX stations on ten to 40 are fast. The bedding speedway star in the shape of 7D's has

sharped the world and his uncle, by dispensing of the usual four word canary in continuity, a truly great jingle which is still the only car known to modern science that can have 365 years changed (down of course) on any given hill and still have some to spare. At least one very happy memory remains with me of a trip in the Flat. But I digress. Longtime listeners will be aware that in with it, but wouldn't four of us look silly turning up at the annual dinner of the two wheeled wonder.

7XW showing an interest in DX on 7 Mc. with a VHF on phone. Seems to be quite a bit of Pacific activity around on this band. Myself, I am not being worked up as I don't have even one juice bit of scandal to vent this month. 7AM said recently that he was sparkling on all 144 of these megacycles out of his way, but as we have no means of listening to them, I have to leave that to him. I.M.P. mope to verify or argue. Here in search of something new I unhooked the main power supply on my parallel 807s and hit them in the kisser with the full output from a "B" eliminator, net result a full 5 watt input and believe me, I've never heard a better 7MC. 7KX, 7OM, 7LZ, 7SD. To date the score is VK, ZL, W, and KLT in a couple of weeks—not amazing DX, but lots of fun on QRP.

Believe 7KB is aching me for a new set of ear drums, believed when I changed from 3 watts to 8W in the middle of a QSO, but why should Ian worry, he can get a new set at cost price. That's the work so, in case you mislay our brand new invitation card, the next day to remember is Friday, 10th November.

CORRESPONDENCE

The opinions expressed in these letters are the individual opinions of the writer, and do not necessarily coincide with those of the publishers.

CHALLENGE ACCEPTED RE VK8

Editor "A.R.", Dear Sir,

In the Queensland Divisional Notes in the last issue of "A.R." reference is made to VK4GG having a challenge QSO with a VK8. This challenge is issued as to whether another State can boast such a QSO? I am sorry to have to disillusion our Queensland friends, but the answer is very definitely **yes**.

In my group, I had three or four contacts with VK8s, and hereby quote an instance, taken from a dog-eared old log book of "OANNO":—

"Date, 25th October, 1927; wavelength (we weren't on freq., then) 32 metres. Transmitter, parallel UX210s in Harriet circuit, with 50 watts input. Antenna, 52 feet Zep. Station, B. 1000, A. 1000, Australian Inland Mission at Alice Springs."

Contacts with OANAO followed on schedule for a week or so and some traffic was handled.

I recall also working another OAS in those days somewhere around Tamani, and another at Temsant's Creek. Of course, there was also the well known VK2ZL, operated by Joe Karr, at Alice Springs. The latter I should think might have been the first Amateur Station using a "commercial" call sign. Later, in 1930, I myself used a three letter call sign allocated as VIX, at Wyndham Meats in the Kimberley country. Also, I had another (strictly Amateur) call sign at that location, VK6NE.

—DON B. KNOCK, VK2NO.

[See Federal QSL Bureau notes. VK5RX and VK5LZ also claim working VK8X (Alf Traeger of undying Australian Inland Mission fame).—Ed.]

HAMADS

9d. per line, minimum 2/-.

Advertisements under this heading will only be accepted from Institute Members who desire to dispose of equipment which is their own personal property. Copy must be received by 8th of the month, and cancellation of advertisement is guaranteed. Calculation of cost is based on an average of six words a line. Dealers' advertisements not accepted in this column.

AMATEUR selling up, going abroad. Lots of items of interest will go cheaply. Gear includes BC453 Q5'er, 6Mx. Converter, 8 tube 2 Mx. Rx., Generators, Xtls, 576 Mc. Tx and Beams, 808s, 800s, 807s, etc., co-ax cable 45 and 70 ohm, 1,000 volt a side 250 Ma. Transformer, 1N34s, Field Strength Meters, etc., etc. Call and inspect at 1 Oxford St., Box Hill, Vic. (evenings and Saturdays). K. McTaggart.

FOR SALE—All my 144 Mc. gear as follows: Receiver—17 tube triple conversion, crystal controlled h.f. oscillator and tuned i.f. amplifier, crystal controlled third oscillator and b.f.o., S meter, noise limiter, etc. Transmitter—8 tube with 832 final, plate and screen modulated, built-in modulator and speech amplifier from low level mike, includes crystals on 144, 145, 146, 147 and 148 Mc. Both above items are built in commercial type black crackle cabinets with well arranged and lettered panels. Receiver is tuned by slow motion gear driven dial and is directly calibrated in frequency, each 100 Kc. occupying half an inch on the scale. The above outfit regularly works Melbourne and Geelong stations from Yallourn and has made contact with Ballarat. Complete, less speaker and power supply, Receiver £25; Transmitter £15. J. E. Rogers, 61 Broadway West, Yallourn, Vic.

FOR SALE—AR7 Receiver, 140 Kc. to 25 Mc., good order and appearance. Transmitter phone-c.w. 80 to 10 Mx. in black crackle cabinet. 6V6 osc., 807 final, 6N7 mod. Includes Trimax Hi-Fi Class B driver and multi-match modulation Transformers. Meter switching; professional appearance. Also Crystal, antenna relay, power supplies, £65 lot. Consider separate offers. L. Hearnes, "Radio Australia," Shepparton, Vic.

FOR SALE—AR8 Receiver in perfect order, new A.C. power pack, new Rola 8" per. mag. speaker, £25; less power pack and speaker, £18. K. Cairns, Hygeia Street, Rye, Victoria.

FOR SALE—Complete 60 watt phone, c.w. transmitter. Covers 7, 14, and 28 Mc. bands. Ready for immediate use. What offers? N. H. Hollins, 91 Walpole St., Kew, Vic. (WA 9069).

FOR SALE—Dural tube 1" diam. heavy gauge, numerous lengths to 14 ft. 9d. ft. R. W. Edwards, 15 Hinkler St., Brighton-le-Sands, N.S.W. (LX 1719).

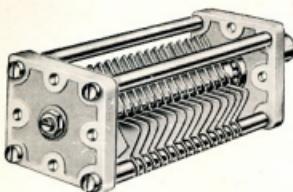
FOR SALE—Magnificent double conversion superhet (see article "A.R.", March, 1949). Owner selling up. D. R. Ayre, WX 4767 (Vic.), nights only.

FOR SALE—Station consisting 2/100 w. phone Tx, rack mounted Super Pro and BC342, mod. S/A etc. 6 Mx. Converter, CRO, and workshop full of parts, no rubbish, £250. Consider exchange. Letter only to C. P. Smith, 275 City Road, South Melbourne, Victoria.

FOR SALE—Type A Mk. III, Transceiver 110-250 AC or 6v. DC, band spread on 80 and 40 and dial directly calibrated in frequency. As new, but no spares, £10. Type 3 Mk. II. Transceiver, converted to 807 in lieu of 6L6 and fitted terminals for plate and screen modulation. Receiver band spread on 80, 40, and 20. Complete with power supply and coils for 80, 40, 20, but no spares, as new £20. English RF unit type 26 converter, covers 50-54 Mc. complete with tubes, new, £5. J. E. Rogers, 61 Broadway West, Yallourn, Victoria.

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The Condensers listed below are of identical construction, only the length varying according to the capacity value. Ceramic end plates, 2½" square, are employed and the amount of metal is a minimum consistent with rigidity. A single point rotor cartridge connection is provided, circulatory R.F. currents thereby being prevented. Lugs on the top and bottom plates are provided for fixing the antenna coil or they can be used for connections to stand-off insulators, etc. Alternative contact points are available. The vane spacing is 0.08" - adequate for high voltages, provided D.C. is removed from the plates. A binding connection between rotor and earth. Metal supports (including mounting pillars) are supplied for three point chassis fixing. Standard 1½" spindle. Each Condenser is of the split stator type, directly applicable to balanced circuits. For aerial tuning and single-ended circuits, one section may be used, single or both can be used in parallel. For wide range working capacities thus becomes available. For example, the Cat. No. 612 is 25 pF. maximum overall as split-stator, 50 pF. one section, and 100 pF. with the stators in parallel. The Cat. No. 613 is fitted with built-in Neutralising Condensers (one at each end), variable between 1.5 and 7 pF.

Cat. No. 611: 25 pF. per section with Neutralising Cond. Cat. No. 612: 50 pF. per sec. Cat. No. 614: 100 pF. per sec.



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Cat. No. 1090.

FREQUENTITE SUB-BASE

The Sub-Base is in Frequentite Ceramic and is easily attached to the Former by the two bolts and Frequentite Pillars provided. It can be used separately as a base for self-supporting Inductors. Heavy duty slotted power type plugs give positive electrical contact and even fitting to the Ceramic is assured by lead washers. Leads are secured by heavy gauge tinned phosphor bronze self-locking tags.

Cat. No. 1091.



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The Base is provided with Frequentite Pillars for above chassis mounting. Heavy duty power type sockets give sound electrical connection with Sub-Base and lead washers on each socket ensure even fitting to Ceramic. Leads are secured by heavy gauge tinned phosphor bronze self-locking soldering tags.

Cat. No. 1092.

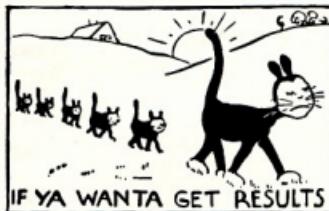
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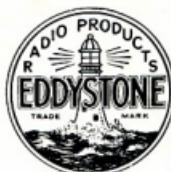
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